S
330.9786
M44mes
1970
Vol. 1 Chapter 1
University of Montana (Missoula). Bureau of Business and Economic Research
Montana economic study

Montana Economic Study

STATE DOCUMENTS

research report

STATE DOCUMENTS COLLECTION
JUN 8 1988
MONTANA STATE LIBRARY
1515 E. 6th AVE.
HELENA, MONTANA 59620

part 1: THE MONTANA ECONOMY

Volume 1, Chapter 1

Summary of Findings and a Consideration of Their Implications

MONTANA STATE LIBRARY
Helena, Montana

MONTANA STATE LIBRARY
1515 E. 6th AVE.
HELENA, MONTANA 59620

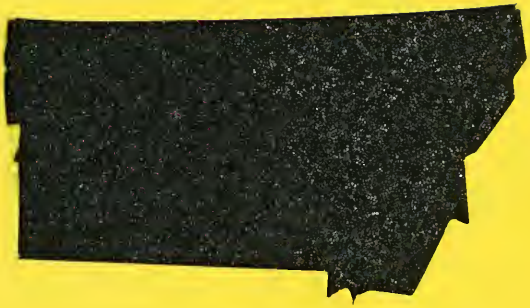
Bureau of Business and Economic Research

UNIVERSITY OF MONTANA
MISSOULA
MONTANA

PLEASE RETURN

JUN 3 0 1993

Montana State Library
3 0864 1004 4662 7



BILL CHRISTIANSEN
HARDIN, MONT.

MONTANA STATE LIBRARY
930 E. LYNDALE AVE.
HELENA, MONTANA 59620

JUN 7 1968
APR 12 1989

MONTANA STATE LIBRARY
930 East Lyndale Avenue
Helena, Montana 59601

STATE DOCUMENTS

MONTANA STATE LIBRARY

Volume 1, Chapter 1

Summary of Findings and a Consideration of Their Implications

October 1970

Montana Economic Study

Research Report

Project No. Montana P-31

Prepared under agreement for the Montana State Department of Planning and Economic Development, Montana State Water Resources Board and the University of Montana. The preparation of this document was financed in part through the Urban Planning Grant from the Department of Housing and Urban Development, under the provisions of Section 701 of the Housing Act of 1954, as Amended.

University of Montana
School of Business Administration
Bureau of Business and Economic Research

1970

MONTANA ECONOMIC STUDY

Director

Samuel B. Chase, Jr.

Research Associates

Kenneth P. Johnson
Maxine C. Johnson
Peter C. Lin
Paul E. Polzin

Research Assistants

Robert J. Bigart
Steven A. Carlson
Peter D. MacDonald
Susan S. Wallwork

Student Assistant

Loren O. Cabe

Clerical

Dorothy Burger
Marena Cabe
Betty Hauber
Shirley Maltese
Linda McDonald
Randy Otness
Hollis Wink
Sheryl Wiseley

Table of Contents

Part 1: THE MONTANA ECONOMY

Volume 1

1. *Summary of Findings and a Consideration of Their Implications*

Montana's Economy: 1950-1968	1.2
What Will the Future Bring?	1.20
Montana's Economic Regions	1.24
Poverty and Unemployment	1.32
Pollution and Environmental Quality	1.39
Climate, Recreation, and the Effects of Scattered Population	1.42
Pros and Cons of Faster Growth	1.49
State Development Policies	1.64
Some Conclusions	1.88

Volume 2

2. *Montana's Slow Growth: Population, Employment, and Migration, 1950 to 1968*

Employment and Migration, 1950-1960 and 1960-1968	2.2
A Detailed Look at Employment, 1950-1968	2.13
Why Montana's Employment Lagged	2.26
Patterns of Migration	2.41
Conclusion	2.51

3. *Personal Income in Montana, 1950-1968*

Personal Income: What it Measures	3.2
Personal Income, 1929-1968: An Overview	3.7
Conversion to Dollars of Constant Purchasing Power	3.11
The Lagging Growth of Real Personal Income	3.17
Per Capita Personal Income	3.23
Summing Up	3.51

4. *Projections of Employment and Income in 1980*

Projections for Montana	4.6
Montana's Personal Income in 1980	4.38
A Broad Perspective on the Decade Ahead	4.49

Contents (Continued)

Volume 3

5. *The Regions of Montana*

1950-1968: An Overview 5.3
A Detailed Look at the Six Regions, with Projections for 1980 5.9

6. *Poverty, Unemployment, and Investment Capital*

Income Inequality and Poverty 6.2
Unemployment 6.26
Private Investment Capital 6.37

7. *Pollution and the Economics of Environmental Quality Control*

Pollution is Not New 7.3
Air Pollution in Montana Today 7.5
Water Pollution 7.15
What Economics Has to Say 7.17

8. *The Natural Setting: Climate, Outdoor Recreational Opportunity, and the Problems of Sparse Population*

Montana Climate and Outdoor Recreational Opportunities 8.2
The Effects of Sparse Population Upon Social and Cultural Life 8.16

Part 2: THE INDUSTRIES OF MONTANA

Volume 1

1. *Agriculture*

A Brief History 1.6
Montana Agriculture Today 1.28
The Outlook 1.61

Contents (Continued)

2. *The Mineral Industries*

Metal Mining and the Primary Metals Industries 2.11
Bituminous Coal and Lignite Mining 2.39
The Petroleum and Gas Industries 2.52
Other Mineral Industries 2.69
The Overall Outlook 2.75

Volume 2

3. *Manufacturing*

A General Survey 3.2
Food and Kindred Products 3.19
The Wood Products Industries: Lumber and Wood Products, Paper and Allied Products 3.37
The Outlook for Manufacturing 3.71

4. *The Construction Industry*

The Industry Since 1950 4.5
Housing 4.22
The Outlook 4.30

Volume 3

5. *The Trade, Service, and Finance Industries*

The Development of Trade Centers 5.3
Retail Trade and Services 5.7
The Tourist Industry 5.23
Wholesale Trade 5.32
The Finance Industries 5.37
The Outlook 5.44

6. *The Transportation, Communication, and Public Utilities Industries*

Transportation 6.5
Communications 6.14
Public Utilities 6.15
The Outlook 6.23

7. *Government*

Federal Government 7.4
State and Local Government 7.19
The Outlook: A Final Word 7.32

Part 1

Figures

Volume 1

Page

1. Summary of Findings and a Consideration of Their Implications

1.1 Percentage Increases in Population, Employment, and Income, United States, Rocky Mountain States, and Montana, 1950-1968 1.5
1.2 Percentage Increase in Population, Rocky Mountain States, 1950-1968 1.7
1.3 Per Capita Personal Income, United States and Rocky Mountain States, 1950 and 1968 1.10
1.4 Per Capita Personal Income as a Percentage of United States Average, Rocky Mountain States, 1950 and 1968 1.12
1.5 Civilian Employment, Montana, 1950, 1960, 1968, and Projected 1980 1.22
1.6 Montana Economic Regions 1.25
1.7 Percentage Change in Population and Civilian Employment, Montana Economic Regions, Projected 1968-1980 1.29
1.8 Per Capita Personal Income, Montana Economic Regions, 1950, 1966, and Projected 1980 1.30
1.9 Unemployment as a Percentage of the Civilian Labor Force, Montana and United States, 1957-1969 1.38
1.10 Percentage Change in Population, Montana Counties, 1960-1970 1.82

Volume 2

2. Montana's Slow Growth: Population, Employment, and Migration, 1950 to 1968

2.1 Net Migration From 1950 to 1960 in Relation to Average of 1950 and 1960 Per Capita Income, 48 Conterminous States 2.6
2.2 Distribution of Employment by Industry, Montana and United States, 1950, 1960, and 1968 2.18
2.3 Age-Distribution of Resident Population, Montana and United States, 1950, 1960, and 1968 2.47

3. Personal Income in Montana, 1950 to 1968

3.1 The National Income and Product Accounts - 1968 3.5
3.2 Personal Income, Montana and United States, 1929-1968 3.10
3.3 Per Capita Personal Income, Montana and United States, 1929-1968 3.12

Figures (Continued)

Page

3.4 Implicit Price Deflator for Personal Consumption Expenditures, and Consumer Price Index, United States, 1950-1968 3.15
3.5 Personal Income, Montana and United States, 1950-1968 3.16
3.6 Percentage Distribution of Total Personal Income, by Source, Montana and United States, 1950-1968 3.22
3.7 Indexes of Prices Paid and Prices Received by Farmers, Montana, 1950-1968 3.34
3.8 Participation Income Per Worker, Agricultural and Civilian Nonagricultural Sectors, Montana and United States, 1950-1968 3.35
3.9 Average Annual Earnings by Major Industry Groups, Montana, 1950, 1960, 1968 3.39

4. *Projections of Employment and Income in 1980*

Volume 3

5. *The Regions of Montana*

5.1 Montana Economic Regions 5.2
5.2 Percentage Share of State Population, Employment, and Income, Regions of Montana; Population and Employment, 1950, 1960, and 1968; Income, 1950, 1959, and 1966 5.4
5.3 Region I: Employment and Income 5.10
5.4 Region II: Employment and Income 5.21
5.5 Region III: Employment and Income 5.29
5.6 Region IV: Employment and Income 5.37
5.7 Region V: Employment and Income 5.46
5.8 Region VI: Employment and Income 5.53

6. *Poverty, Unemployment, and Investment Capital*

6.1 Median Family Incomes in 1959, White and Nonwhite, State of Montana and 7 Counties 6.22
6.2 Percentage of Families with Incomes Under $3,000 in 1959, White and Nonwhite, State of Montana and 7 Counties 6.22
6.3 Seasonally Adjusted Unemployment as a Percentage of the Civilian Labor Force, Montana and United States, Monthly, 1957-1969 6.27
6.4 Unemployment as a Percentage of the Civilian Labor Force, Montana and United States, Monthly, 1957-1969 6.30

Figures (Continued)

Page

7. Pollution and the Economics of Environmental Quality Control

7.1 Average Total Suspended Particulate in the Air and Organic Fraction of Total Suspended Particulate, Seven Montana Cities and Six Comparison United States Cities, June 1961-July 1962 7.7
7.2 Benzo(a)pyrene (BaP) Content of Air, Seven Montana Cities and Three Comparison United States Cities, July 1961-December 1961 7.8
7.3 Average Arsenic Content in the Air, Seven Montana Cities and Five Comparison United States Cities, June 1961-July 1962 7.9

8. The Natural Setting: Climate, Outdoor Recreational Opportunity, and the Problems of Sparse Population

8.1 Average Annual Number of Cloudy Days in the Contiguous United States 8.4
8.2 Percentage of Possible Sunshine in Winter (December--February) in the Contiguous United States 8.5
8.3 Percentage of Possible Sunshine in Summer (June--August) in the Contiguous United States 8.5
8.4 Climatic Data for Selected Stations 8.8
8.5 Regional Distribution of Population, Area, and Recreation Acreage, 48 Contiguous States, 1960 8.11
8.6 National Forests of Montana, 1969 8.15
8.7 State of Montana Fish and Game Planning Regions, 1969 8.17
8.8 Cultural Organizations for the Nonstudent Population, Montana, 1967 8.27
8.9 Cultural Organizations for the Nonstudent Population, Montana Economic Regions, 1967 8.28

Part 1

Tables

Volume 1 Page

1. Summary of Findings and a Consideration of Their Implications

1.1 Percentage Change in Personal Income, United States and Rocky Mountain States, 1950-1968 1.8
1.2 Population, Employment and Income, Montana and Neighboring States, 1950 and 1968 1.13
1.3 Resident Population and Total Civilian Employment, Montana, 1950, 1960, 1968 and Projected 1980 1.21
1.4 Total Personal Income and Per Capita Personal Income, Montana and United States, 1960, 1968, and Projected 1980 1.23
1.5 Population and Civilian Employment, Montana Economic Regions, 1950, 1968, and Projected 1980 1.27
1.6 Percentage Distribution of Money Income of Families, Montana and United States, 1959 1.33
1.7 Percentage Distribution of Money Income of Families and Median Family Income, Urban and Rural Areas, Montana and United States, 1959 1.34
1.8 Fortune Survey of Community Factors Affecting Location Decisions 1.68
1.9 State and Local Tax Policies Designed to Attract and to Hold Industry Classified by Type and Character of Action 1.71
1.10 Percent of Total Taxes Accounted for by Levies with an Initial Impact on Business, Montana, Neighboring States and U.S. Average; 1957 and 1967 1.72

Volume 2

2. Montana's Slow Growth: Population, Employment, and Migration, 1950 to 1968

2.1 Population and Total Civilian Employment, Montana, 1950, 1960, and 1968; and Percentage Change in Population and Civilian Employment, Montana and United States, 1950-1960 and 1960-1968 2.3
2.2 Estimates of Montana Civilian Labor Force Migration and the "Job Gap," 1950-1960 2.9
2.3 Estimates of Montana Civilian Labor Force Migration and the "Job Gap," 1960-1968 2.12

Tables (Continued)

Page

2.4 Civilian Employment, Montana, 1950, 1960 and 1968 2.14
2.5 Percentage Change in Civilian Employment, Montana and United States, 1950-1960 2.21
2.6 Percentage Change in Civilian Employment, Montana and United States, 1960-1968 2.24
2.7 Percentage Distribution of Civilian Primary Employment Among Industries, Montana and United States, 1950 2.29
2.8 Percentage Change in Civilian Primary Employment in Montana and United States; and Montana's Actual and Hypothetical Change in Primary Employment, 1950-1968 2.31
2.9 Derivative Employment Per 1,000 Total Civilian Employment, Montana and United States, 1950 and 1968 2.37
2.10 Derivative Employment Per 1,000 Resident Population, Montana and United States, 1950 and 1968 2.38
2.11 State and Local Government Employees Per 1,000 Resident Population, 1967, By States Ranked from High to Low 2.40
2.12 Net Migration by Age and Sex, Montana, 1950-1960 2.43
2.13 Net Migration by Age, Montana, 1950-1960 and 1960-1968 2.45
2.14 Net Geographic Migration by Age, Sex, and Years of School Completed, Montana, 1950-1960 2.50

3. Personal Income in Montana, 1950 to 1968

3.1 Percentage Change in Per Capita Personal Income, Ranked From High to Low, 1950-1968 3.3
3.2 Total Personal Income, Montana and United States, 1968 3.8
3.3 Personal Income, by Source, Montana and United States, 1950, 1960, and 1968; and Average Annual Rate of Change, by Source, Montana and United States, 1950-1960 and 1960-1968 3.18
3.4 Per Capita Personal Income, by State, Ranked From High to Low, 1950, 1960, and 1968 3.25
3.5 Per Capita Personal Income, by Type, Montana and United States, 1950 and 1960 3.26
3.6 Sources of Differences in Civilian Per Capita Participation Income, Montana and United States, 1950 and 1960 3.29
3.7 Civilian Participation Income Per Worker, Montana and United States, 1950 and 1960 3.32
3.8 Factors Accounting for Changes in Per Capita Personal Income, Montana and United States, 1950-1960 3.40
3.9 Per Capita Personal Income, by Type, Montana and United States, 1960 and 1968 3.45
3.10 Sources of Differences in Civilian Per Capita Participation Income, Montana and United States, 1960 and 1968 3.47
3.11 Participation Income Per Worker, Montana and United States, 1960 and 1968 3.48

Tables (Continued)

Page

3.12 Factors Accounting for Changes in Per Capita Personal Income, Montana and United States, 1960-1968 3.50

4. Projections of Employment and Income in 1980

4.1 Resident Population and Total Civilian Employment, Montana, 1950, 1960, 1968 and Projected 1980 4.8
4.2 Projected Montana Civilian Labor Force Migration and the "Job Gap," 1968-1980 4.11
4.3 Civilian Employment, by Industry, Montana, 1950, 1960, 1968 and Projected 1980 4.14
4.4 Change in Civilian Employment, by Industry, Montana, 1950-1960, 1960-1968, and Projected 1968-1980 4.15
4.5 Derivative Employment Per 1,000 Resident Population, Montana, 1950, 1960, 1968 and Projected 1980 4.28
4.6 Total Personal Income and Per Capita Personal Income, Montana and United States, 1950, 1960, 1968 and Projected 1980 4.41
4.7 Per Capita Personal Income, by Type, Montana, 1960, 1968 and Projected 1980 4.43
4.8 Civilian Participation Income Per Worker, Montana, 1960, 1968, and Projected 1980 4.46

Volume 3

5. The Regions of Montana

5.1 Per Capita Personal Income and Civilian Participation Income Per Worker, Region I, 1950, 1959, and 1966 5.13
5.2 Resident Population and Total Civilian Employment, Region I, 1950, 1960, 1968 and Projected 1980 5.15
5.3 Civilian Employment, Region I, 1968 and Projected 1980 5.16
5.4 Total Personal Income and Per Capita Personal Income, Region I and Montana, 1959, 1966 and Projected 1980 5.18
5.5 Resident Population and Total Civilian Employment, Region II, 1950, 1960, 1968 and Projected 1980 5.20
5.6 Per Capita Personal Income and Civilian Participation Income Per Worker, Region II, 1950, 1959, and 1966 5.23
5.7 Civilian Employment, Region II, 1968 and Projected 1980 5.26
5.8 Total Personal Income and Per Capita Personal Income, Region II and Montana, 1959, 1966, and Projected 1980 5.27
5.9 Per Capita Personal Income and Civilian Participation Income Per Worker, Region III, 1950, 1959, and 1966 5.31
5.10 Resident Population and Total Civilian Employment, Region III, 1950, 1960, 1968 and Projected 1980 5.33
5.11 Civilian Employment, Region III, 1968 and Projected 1980 5.34

Tables (Continued)

Page

5.12 Total Personal Income and Per Capita Personal Income, Region III and Montana, 1959, 1966 and Projected 1980 5.35
5.13 Per Capita Personal Income and Civilian Participation Income Per Worker, Region IV, 1950, 1959, and 1966 5.40
5.14 Resident Population and Total Civilian Employment, Region IV, 1950, 1960, 1968 and Projected 1980 5.41
5.15 Civilian Employment, Region IV, 1968 and Projected 1980 5.42
5.16 Total Personal Income and Per Capita Personal Income, Region IV and Montana, 1959, 1966 and Projected 1980 5.44
5.17 Per Capita Personal Income and Civilian Participation Income Per Worker, Region V, 1950, 1959, and 1966 5.48
5.18 Resident Population and Total Civilian Employment, Region V, 1950, 1960, 1968 and Projected 1980 5.49
5.19 Civilian Employment, Region V, 1968 and Projected 1980 5.50
5.20 Total Personal Income and Per Capita Personal Income, Region V and Montana, 1959, 1966 and Projected 1980 5.52
5.21 Per Capita Personal Income and Civilian Participation Income Per Worker, Region VI, 1950, 1959, and 1966 5.55
5.22 Resident Population and Total Civilian Employment, Region VI, 1950, 1960, 1968 and Projected 1980 5.57
5.23 Civilian Employment, Region VI, 1968 and Projected 1980 5.58
5.24 Total Personal Income and Per Capita Personal Income, Region VI and Montana, 1959, 1966 and Projected 1980 5.59

6. Poverty, Unemployment, and Investment Capital

6.1 Percentage Distribution of Money Income of Families, Montana and United States, 1959 6.5
6.2 Percentage Distribution of Money Income of Families and Median Family Income, Urban and Rural Sectors, Montana and United States, 1959 6.7
6.3 Family Money Income by Occupation of Head of Family, Families with Heads in Experienced Civilian Labor Force, Montana and United States, 1959 6.11
6.4 Median Income of Persons 25 Years and Over, by Sex and by Years of School Completed, Montana, 1959 6.13
6.5 Percentage Distribution of Family Money Incomes by Level of Income and Median Family Incomes, Montana Counties by Economic Regions, 1959 6.15
6.6 Percentage Distribution of Families by Level of Money Income and by Color, Montana, 1959 6.19
6.7 Place of Residence of Families, Montana, 1960 6.20
6.8 Percentage Distribution of School Years Completed and Median School Years, Persons 25 Years Old and Over, by Color, Montana, 1940, 1950, and 1960 6.23
6.9 Median Earnings of Workers in 1959 and Percentage Distribution by Occupation and by Color in 1960, Experienced Civilian Male Labor Force, Montana 6.25

Tables (Continued)

Page

6.10 Unemployment Rates by Color, Sex, and Place of Residence, Montana, April 1960 (Percent of Civilian Labor Force) 6.33
6.11 Unemployment Rates by County and Region, Montana, April 1960 6.35
6.12 Average Weekly Earnings of Production Workers on Manufacturing Payrolls, 50 States, 1950, 1960, 1968 6.38
6.13 Gross and Net Capital Stock Per Production Worker and Production Man-Hour, Forty-eight Conterminous States Ranked from High to Low by Gross Capital Stock Per Production Worker, 1957 6.41
6.14 Number, Size, and Value of Farms, Montana and United States, 1950 and 1964 6.45
6.15 Assets and Deposits of all Insured Commercial Banks, Montana and United States, End of Year, 1950 and 1968 6.48

7. *Pollution and the Economics of Environmental Quality Control*

8. *The Natural Setting: Climate, Outdoor Recreational Opportunity, and the Problems of Sparse Population*

8.1 Discomfort Index for Selected United States Weather Stations Arranged According to July Index 8.6
8.2 Total Land and Water Area, Acreage of Nonurban Public Designated Recreation Areas, and Population, by Census Region, United States, 1960 8.10
8.3 Recreation Areas and Population, Western United States, 1962 8.12
8.4 Distribution of Outdoor Recreation Acreage and Population, by Fish and Game Planning Regions, Montana, 1969 8.18
8.5 Population and Percentage Change, Montana Counties by Economic Region, April, 1950, 1960, and 1968 8.23

PART 2

Figures

Volume 1

Page

1. Agriculture

1.1 Agricultural Employment, Montana and the United States, 1900-1969 1.4
1.2 Montana Cattle and Calves--Marketings, Cash Receipts, and Prices, 1950-1968 1.15
1.3 Wheat--Production, Cash Receipts, and Prices--Montana, 1950-1968 1.18
1.4 Prices Paid for Commodities Used in Production and Prices Received for All Farm Products, Montana, 1950-1968, Indexed 1.21
1.5 Output Per Man-Hour in the Private Economy, United States, 1950-1968, Indexed 1.26
1.6 Cash Receipts From Farm Marketings and Government Payments, Montana, 1950-1969 1.43

2. The Mineral Industries

2.1 Total Value of Mineral Production in Montana, 1905-1969 2.5
2.2 Mine Production of Copper, Montana and the United States, and Copper Prices, 1950-1969 2.19
2.3 Copper Production and Metal Mining Employment, Montana, 1950-1969 2.24
2.4 Changes in Output and Production Costs, Montana's Copper Industry, 1950-1966 2.26
2.5 Coal Production and Employment, Montana, 1950-1969 2.45
2.6 Crude Oil Production in Montana, 1950-1969 2.58
2.7 Crude Oil Production and Employment in Montana, 1950-1969 2.65
2.8 Crude Oil Refined and Employment in Refining, Montana, 1953-1969 2.66

Volume 2

3. Manufacturing

3.1 Manufacturing Employment, Montana and the United States, 1950-1969 3.10
3.2 Meat Production in Montana, 1958-1969 3.28
3.3 Lumber Production in Montana and the United States, 1904-1968 3.43
3.4 Employment in the Lumber and Wood Products Industry, Montana and the United States, 1950-1969 3.50
3.5 Employment and Production in Montana Lumber and Wood Products Industry, 1950-1969 3.52
3.6 Lumber Consumption and the Number of New Housing Starts, United States, 1950-1969 3.61

Figures (Continued)

4. The Construction Industry Page

4.1 Employment in the Construction Industry, Montana and the United States, 1950-1969 4.6
4.2 Employment in General Building Construction and Special Trade Contracting, Montana and the United States, 1950-1969 4.7
4.3 Employment in Heavy Construction, Montana and the United States, 1950-1969 4.8
4.4 Value of Total Construction Contracts, Montana and the United States, 1956-1969 4.11
4.5 Value of Nonfarm Residential Construction Contracts, Montana and the United States, 1956-1969 4.12
4.6 Value of Nonresidential Building Contracts, Montana and the United States, 1956-1969 4.13
4.7 Value of All Building Contracts, Montana and the United States, 1956-1969 4.14
4.8 Value of Nonbuilding Construction Contracts, Montana and the United States, 1956-1969 4.15

Volume 3

5. The Trade, Service, and Finance Industries

5.1 Retail Sales, Montana and the United States, 1948-1967 5.11
5.2 Receipts of Selected Service Establishments, Montana and the United States, 1948-1967 5.12
5.3 Wholesale Sales, Montana and the United States, 1948-1967 5.33

PART 2

Tables

Volume 1 Page

1. Agriculture

1.1 Rural Farm Population and Farm Employment, Montana, 1900-1969 1.2
1.2 Number of Farms and Land in Farms, Montana, 1920-1964 1.8
1.3 Personal Income Originating on Farms, Montana, 1950-1968 1.11
1.4 Net Income Per Farm, Montana, 1950-1968 1.12
1.5 Montana Farm Employment, 1950-1968 1.24
1.6 Importance of Agriculture in Montana Economic Regions 1.30
1.7 Characteristics of Commercial Farms and Ranches by Economic Class, Montana, 1964 1.32
1.8 Proportion of Commercial Farms in Each Economic Class, by Regions, Montana, 1964 1.33
1.9 Land in Farms According to Use, Montana, 1964 1.39
1.10 Cash Receipts by Farm Commodities, Montana, 1968 1.45
1.11 Government Payments to Farmers and Ranchers, by Program, Montana, 1969 1.46
1.12 Exports of Hard Spring Wheat Through Pacific Coast Ports, Marketing Years 1962-63 Through 1968-69 1.48
1.13 Cattle and Calves on Feed and Marketed, Montana, 1950-1970 1.54

2. The Mineral Industries

2.1 Mineral Production in Montana, 1969 2.4
2.2 Employment and Earnings in Montana's Mineral Industries, 1968 2.9
2.3 Employment in Metal Mining, Smelting and Refining, Coal, Petroleum and Gas, and Other Nonmetallic Minerals, Montana, 1950-1969 2.10
2.4 Value Added in Smelting and Refining of Nonferrous Metals: Some Comparisons, Montana and the United States, 1963-1966 2.27
2.5 Total Earnings From Mining, by Economic Regions, Montana, 1966 2.33
2.6 Employment and Earnings in Montana's Metals Industries, 1968 2.35
2.7 Estimated Original Coal Reserves in Montana, by County 2.41
2.8 Employment and Earnings in Montana's Petroleum Industries, 1968 2.53
2.9 Major Oil Fields, Montana, 1968 2.61
2.10 Oil Refineries in Montana, 1968 2.63
2.11 Employment and Earnings in Montana's Nonmetallic Mineral Industries, 1968 2.71

Tables (Continued)

Volume 2 Page

3. Manufacturing

3.1 Earnings From Manufacturing, by Economic Regions, Montana, 1966 3.3
3.2 Manufacturing in Montana in 1899 3.5
3.3 Manufacturing in Montana in 1939 3.7
3.4 Manufacturing in Montana, 1947-1967 3.9
3.5 Employment and Earnings in Montana's Manufacturing Industries, 1968 3.14
3.6 Employment in Manufacturing, Montana, 1950-1969 3.16
3.7 Employment in the Food Products Industry, Montana, 1950-1969 3.20
3.8 Employment and Earnings in Montana's Food Products Industry, 1968 3.21
3.9 Value Added in the Food Products Industry: Some Comparisons, Montana and the United States, 1958 and 1963-1966 3.23
3.10 Forest Land in Montana, January 1, 1963 3.38
3.11 Commercial Forest Land in Montana, January 1, 1963 3.40
3.12 Montana's Lumber and Wood Products Industry, 1899-1939 3.46
3.13 Employment in the Wood Products and Paper Industries, 1950-1969 3.49
3.14 Montana's Lumber and Wood Products Industry Since 1954 3.54
3.15 Concentration of Montana's Lumber and Wood Products Industry, 1963 3.59
3.16 Employment and Earnings in Montana's Wood Products Industry, 1968 3.64
3.17 Value Added in the Lumber and Wood Products Industry: Some Comparisons, Montana and the United States, 1958 and 1963-1966 3.65

4. The Construction Industry

4.1 Earnings From Contract Construction, by Economic Regions, Montana, 1966 4.3
4.2 Employment in the Construction Industry, Montana, 1950-1969 4.4
4.3 Employment and Earnings in Montana's Construction Industries, 1968 4.21
4.4 Condition of Housing Units in Montana, 1960 4.23

Volume 3

5. The Trade, Service, and Finance Industries

5.1 Employment in Trade, Service, and Finance Industries, Montana, 1950-1969 5.4
5.2 Concentration of Trade, Service, and Financial Activity in Montana Trade Centers 5.8
5.3 Per Capita Retail Sales and Per Capita Receipts of Selected Service Establishments, Montana and the United States, 1963 5.10
5.4 Retail Stores in Montana, 1954, 1963, and 1967 5.15

Tables (Continued)

		Page
5.5	Changes in Numbers of Retail Trade and Service Establishments in Montana Trade Centers, 1954, 1963, and 1967	5.16
5.6	Changes in Retail Trade and Service Activity in Montana Trade Centers, 1963-1967	5.18
5.7	Growth of Retail Trade in Montana, by Economic Regions, 1948-1967	5.20
5.8	Earnings From Trade and Services, by Economic Regions, Montana, 1966	5.22
5.9	Employment and Earnings in Retail Trade and the Service Industries Covered by Unemployment Insurance, Montana, 1968	5.29
5.10	Wholesaling in Yellowstone and Cascade Counties, Montana, 1967	5.35
5.11	Growth of Wholesale Trade in Montana, 1948-1967	5.36
5.12	Employment and Earnings in Wholesale Trade, Montana, 1968	5.38
5.13	Employment and Earnings in Montana's Finance Industries, 1968	5.40
5.14	Earnings From Finance, Insurance, and Real Estate, by Economic Regions, Montana, 1966	5.41

6. The Transportation, Communication, and Public Utilities Industries

6.1	Employment in Transportation, Communication, and Other Public Utilities, Montana, 1950-1969	6.3
6.2	Earnings From Transportation, Communications, and Public Utilities, by Economic Regions, Montana, 1966	6.4
6.3	Employment and Earnings in Montana's Transportation, Communication, and Public Utilities Industries, 1968	6.6
6.4	Installed Capacity of the Electric Utilities Industry, Montana and the United States, 1950-1967	6.17
6.5	Electric Energy Sales by Class of Service, Montana and the United States, 1966	6.18

7. Government

7.1	Civilian Government Employment in Montana, 1950-1969	7.6
7.2	Federal Civilian Employment in Montana and the United States, December 31, 1968	7.7
7.3	Federal Civilian Employment in Montana, by Agency, December 31, 1968	7.8
7.4	Total Earnings From Federal Government, by Economic Regions, Montana, 1966	7.10
7.5	Federal Aid to State and Local Governments and Individuals in Montana, Fiscal 1967	7.15
7.6	Estimated Total Federal Expenditures in Montana: Averages for Fiscal Years 1965-1967	7.17
7.7	Estimated Total Federal Revenue Collected in Montana: Averages for Fiscal Years 1965-1967	7.18
7.8	State and Local Government Employment: Full-Time Equivalent Workers, by Function, Montana, October 1953 and October 1969	7.20

Tables (Continued)

		Page
7.9	State and Local Government Employment: Full-Time Equivalent Workers per 10,000 Inhabitants, by Functions, Montana and the United States, October 1969	7.22
7.10	Per Capita General Revenue of State and Local Governments, Montana and the United States, Fiscal 1968	7.24
7.11	Per Capita General Expenditure of State and Local Governments, Montana and the United States, Fiscal 1968	7.25
7.12	Per Capita General Expenditures of State and Local Government by Function, Montana and the United States, Fiscal 1968	7.26
7.13	Total Earnings From State and Local Government, by Economic Regions, Montana, 1966	7.31

MONTANA ECONOMIC STUDY

Staff Studies

Selected Nonpecuniary Aspects of Life in Montana	Robert Bigart, with a supplementary paper by Edward G. Groenhout
Social Change in Montana	Robert J. Bigart
Social Organization in Montana	Robert J. Bigart
Distribution of Income and its Relation to the Economic Welfare of Montanans	Peter C. Lin
Indians in Montana	Peter C. Lin; Samuel B. Chase, Jr.; and Robert J. Bigart
Net Geographic Migration for Montana, 1950 to 1960, by Age, Sex and Educational Level	Kenneth P. Johnson
Recent Geographic Migration Trends in Montana	Kenneth P. Johnson
Employment in Montana 1960: Analysis by Industry and Occupation	Paul E. Polzin
Employment Trends in Montana: 1950-1968	Paul E. Polzin
Off-Farm Work in Montana	Paul E. Polzin
Structural Determinants of Wage and Income Levels in Montana	Paul E. Polzin

CHAPTER 1

Summary of Findings and a Consideration of Their Implications

Montanans have a vital stake in the performance of the state's economy. The Montana Economic Study endeavors to provide information that will contribute to an understanding of the economic forces that profoundly affect the well-being of the state's residents, and to the formulation of sound state economic policies.

Our Report is divided into two parts. Part 1 analyzes developments between 1950 and 1968, and sets forth projections of population, employment and income in 1980. It also treats a number of particular problems such as poverty, unemployment, pollution and low population density, and points to some of the advantages of life in Montana. Part 2 analyzes each of the state's major industries in detail.

This chapter summarizes the findings of Part 1 and then considers some of the implications of these findings for state economic development policies. The summary set forth here only skims the surface of the detailed analyses found in Chapters 2-8 of Part 1. It is hoped that those who are deeply interested in Montana's economy will read those chapters and all of Part 2 as well. In addition, some readers may want to consult the staff studies that underlie the Report.

MONTANA'S ECONOMY: 1950-1968

The fur trade of the 1840s represented the first significant attempt by white men to make a living in Montana, and from then until World War II, there were few dull moments in the state's economic history. After fur came one economic frontier after another--precious metal mining, then copper mining, then livestock, and then dry-land farming. All of the booms were spectacular, but the last one was probably the most fragile. The heartbreaking agricultural depression of the 1920s led to a massive out-migration of bankrupt farmers, numerous bank failures, and a general economic malaise that persisted during the ensuing years of the national Great Depression of the 1930s. These times bring back memories of stark unemployment in the cities and farms blowing away in never-ending spirals of dust.

Since World War II, Montana's economy has become relatively colorless. Diversification has made it more tame--less dependent on the ups and downs of single industries. The figures presented in this study, therefore, do not reflect any dramatic booms and busts. Rather they portray a steady erosion of the state's position relative to the national economy.

Montana's economic specialization now has many roughly equivalent facets--agriculture, mining and metal processing, forestry, and, in some areas of the state, a substantial tourist business. The two industries that were most critical to Montana as the 1950s began--agriculture and mining--have declined rapidly as sources of employment and income. Narrow specialization is no longer the most notable feature of Montana's economy. What stands out now is sluggish overall growth.

The economic statistic most commonly cited to make this point is per capita personal income--total personal income divided by population. In 1950, Montana was a full 8 percent above the national average by this measure. By 1968, it had dropped to 14 percent below the national average. These income statistics do not take into account differences in living costs among states. Accurate information comparing living costs in Montana with those elsewhere is not available. But available data on living costs in nonmetropolitan urban areas in the western and north central states suggest that while living costs in Montana may be slightly below the average for the nation as a whole--perhaps 2 to 3 percent, they are not nearly enough lower to alter the conclusion that per capita real income in the state is now far below the national average.

Montana's real per capita personal income--that is, per capita income measured in dollars of constant purchasing power--did, to be sure, increase by 26 percent during the 18 years 1950-1968. But nationally, over the same period, real per capita income rose 60 percent, more than twice as much.

It ought to be pointed out that during the years immediately following World War II Montana was unusually prosperous, thanks largely to the favorable prices received by farmers and ranchers. In 1948, per capita personal income in Montana had been 13 percent above the national average, higher than in any other year since 1929, the earliest year for which estimates are available. But since this high point was reached, Montana's relative economic decline has been monotonously steady (although it has been interrupted now and then by years of above-average prosperity for agriculture).

The slow growth of income has been accompanied by a tendency for the state's unemployment rate to hover about 1 percentage point above the national average, and by an increasingly rapid out-migration of residents, especially among the better-educated young people who leave in search of better opportunities elsewhere.

The next few pages compare trends, since 1950, of Montana's population, employment, and income with those of neighboring states and the United States as a whole.

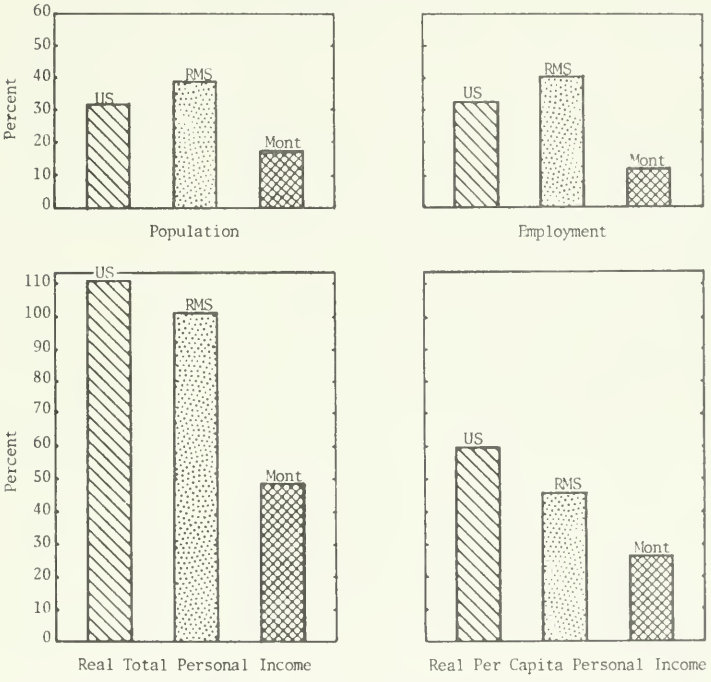
Population, Employment, and Income, 1950-1968

Figure 1.1 shows the percentage growth of population, employment, and income during the 1950s and most of the 1960s for Montana, the United States as a whole, and the Rocky Mountain region (defined by the U.S. Department of Commerce to include Montana, Idaho, Wyoming, Utah, and Colorado).

A glance at the chart shows that Montana has grown less rapidly by all four measures. Over the 18 years 1950-1968, population

Figure 1.1

Percentage Increases in Population, Employment, and Income
United States, Rocky Mountain States, and Montana
1950-1968



Sources: U.S. Department of Commerce, Bureau of the Census; Montana Employment Security Commission; and Montana Economic Study.

NOTES: Employment changes are for 1950-1967.

United States excludes Alaska and Hawaii in 1950 and includes Alaska and Hawaii in 1968.

increased only 17 percent in Montana--not quite half as fast as it did in the Rocky Mountain states as a group, and only slightly more than half as fast as it did nationally.

The slow growth of Montana's population reflected the slow increase in job opportunities in the state. Between 1950 and 1967 (the last year

for which we have an estimate for the Rocky Mountain region), Montana's employment increased only 14 percent, compared with increases of 33 percent nationally and 41 percent in the Rocky Mountain states. (The job statistics used in these comparisons exclude self-employed workers outside agriculture and all household workers. The excluded employment amounts to only about 10 percent of total jobs.)

The best single measure of overall economic activity in the state is total personal income. This figure is estimated each year by the Department of Commerce, and includes current income from all sources.

The bars in the bottom panel of figure 1.1 show percent increases in real personal income between 1950 and 1968--income measured in dollars of constant purchasing power. Montana's real total personal income rose 48 percent over the 18-year period; for the nation as a whole, real total personal income rose 111 percent; and in the 5 Rocky Mountain states as a group, it rose 101 percent. By this measure, then, Montana's economy grew less than half as fast as those of either the nation or the region.

In part, of course, this reflected the slow growth of population and employment in the state. A more meaningful measure of the economic welfare of Montana residents is given by per capita personal income. As we have already noted, Montana's per capita personal income fell from 108 percent of the national average in 1950 to only 86 percent of the national average in 1968.

The right-hand portion of the bottom panel of figure 1.1 shows the same thing in another way. Between 1950 and 1968, per capita personal income in dollars of constant purchasing power rose 60 percent nationally,

and 47 percent in the Rocky Mountain region. But it increased only 26 percent in Montana.

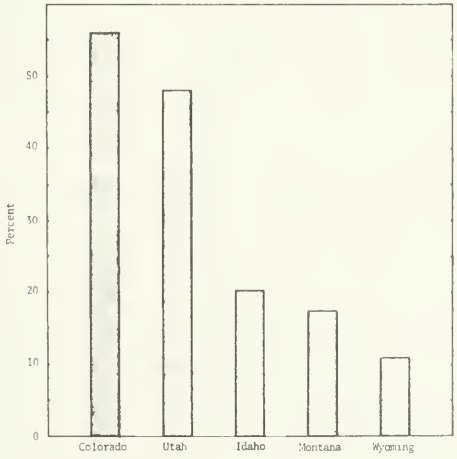
Thus by any of the measures shown in figure 1.1--employment, total income, or per capita income--Montana's economy has been growing slowly.

Individual Rocky Mountain States

Data for the Rocky Mountain states as a group can be deceiving. Colorado and Utah, which together accounted for nearly two-thirds of the region's total population in 1968, have both grown rapidly since World War II. As figure 1.2 shows, Colorado's population increased 56 percent over the 18 years 1950-1968. Utah's population increased 48 percent. But Idaho (20 percent), Montana (17 percent), and Wyoming (11 percent) all lagged far behind.

Figure 1.2

Percentage Increase in Population
Rocky Mountain States, 1950-1968



Source. U.S. Department of Commerce, Bureau of the Census.

The disparate rates of growth of population reflected the much more rapid growth of employment in Colorado and Utah. Agricultural employment fell in all of the Rocky Mountain states. But agriculture is less important, relatively, in Colorado and Utah, and nonagricultural employment grew much faster in both of these states than it did in the rest of the region. Between 1950 and 1968, civilian payroll jobs outside agriculture increased 91 percent in Colorado, and 77 percent in Utah, compared with only 32 percent in Montana, and 46 and 27 percent in Idaho and Wyoming, respectively.

Table 1.1

Percentage Change in Personal Income
United States and Rocky Mountain States, 1950-1968
(1958 Dollars)

	Total Personal Income	Civilian Participation Income		
		Total	Farm	Nonfarm
United States	+111.3	+104.2	-24.9	+116.0
Rocky Mountain States	+100.8	+ 92.1	-29.9	+121.1
Colorado	+142.1	+141.8	-15.3	+165.8
Utah	+121.4	+116.8	-44.3	+135.7
Idaho	+ 71.6	+ 57.9	-20.7	+ 85.5
MONTANA	+ 48.2	+ 30.7	-42.0	+ 64.6
Wyoming	+ 45.2	+ 39.4	-34.5	+ 58.6

Sources: U.S. Department of Commerce, Office of Business Economics; and Montana Economic Study.

Note: United States excludes Alaska and Hawaii in 1950 and includes Alaska and Hawaii in 1968.

The differing rates of change in employment are reflected in differing rates of change in real total personal income. As table 1.1 shows, Colorado's total personal income (in dollars of constant purchasing power) increased by 142 percent between 1950 and 1968--considerably faster than

the nationwide increase of 111 percent. Utah's personal income also grew faster than the U.S. total. Personal income in Montana, Idaho, and Wyoming, however, grew much more slowly.

The second, third, and fourth columns of figures in table 1.1 show the growth of real civilian participation income over the same 18 years. This figure, which accounts for most of total personal income, includes all civilian wages and salaries, and all income of self-employed persons and proprietors of unincorporated businesses. (The balance of personal income is accounted for by military payrolls, property income--interest, dividends, rent--and transfer payments, including social security benefits, welfare payments, and unemployment compensation.)

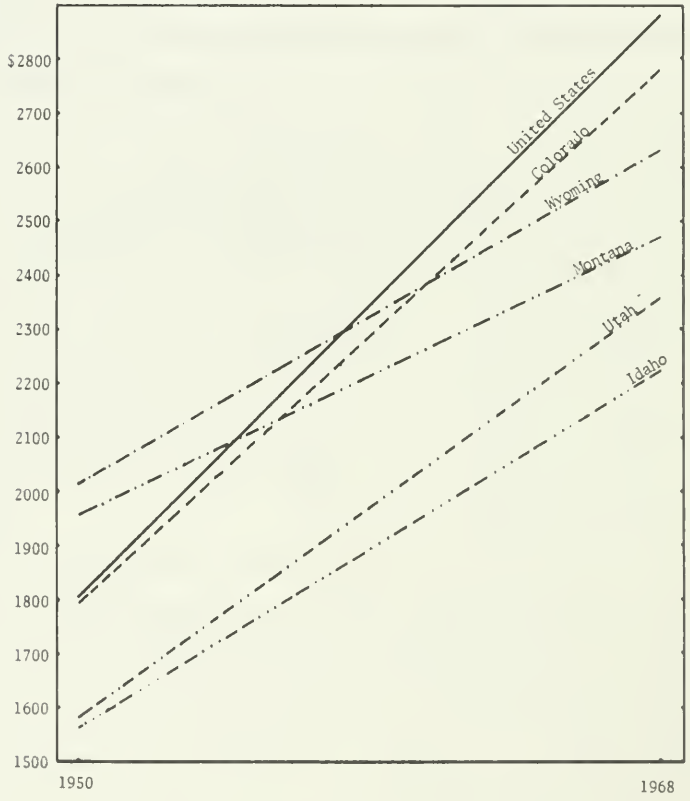
Generally, as participation income goes, so goes total personal income. The second column of table 1.1 shows that real civilian participation income rose faster in both Colorado and Utah than it did nationally, but it rose much more slowly in Idaho, Montana, and Wyoming. In fact, the increase for Montana was only 31 percent over the 18 years, smaller than for any of the other Rocky Mountain states, and less than a third as great as the national increase.

The third and fourth columns of table 1.1 show changes in civilian participation income from agricultural and nonagricultural pursuits separately. Real participation income from farming and ranching fell between 1950 and 1968, both nationally and in every state in the Rocky Mountain region. But the decline was more severe in Montana than in any of the other mountain states except Utah. Montana's real nonfarm participation income rose only 65 percent, little more than half the growth rate for the Rocky Mountain region as a whole. Only in Wyoming was the increase smaller.

The slow growth of Montana's total personal income between 1950 and 1968, then, was due both to a faster-than-average decline of agricultural income and a slower-than-average increase of nonagricultural income.

Figure 1.3

Per Capita Personal Income
United States and Rocky Mountain States, 1950 and 1968
(1958 Dollars)



Sources: U.S. Department of Commerce, Office of Business Economics; and Montana Economic Study.

Note: United States excludes Alaska and Hawaii in 1950 and includes Alaska and Hawaii in 1968.

These facts are not necessarily evidence of a serious economic problem. The data on the growth of per capita real income are. Figure 1.3 shows per capita personal income for the United States and the five Rocky Mountain states in 1950 and 1968, all measured in dollars of 1958 purchasing power. (The use of 1958 dollars follows standard practice of the Department of Commerce.) In 1950, per capita income in Montana was higher than in any other state in the region except Wyoming; it was, as we mentioned earlier, 8 percent above the national average. But by 1968, both the U.S. average and Colorado's per capita income, as well as Wyoming's, were above Montana's. The Montana figure did remain above those for Utah and Idaho.

However, the increases in real per capita income--whether they are measured in dollars or percentages--were greater in every other state in the region. And whereas Montana ranked twelfth among the 48 states in terms of per capita income in 1950, it ranked thirty-first among these same 48 states in 1968.

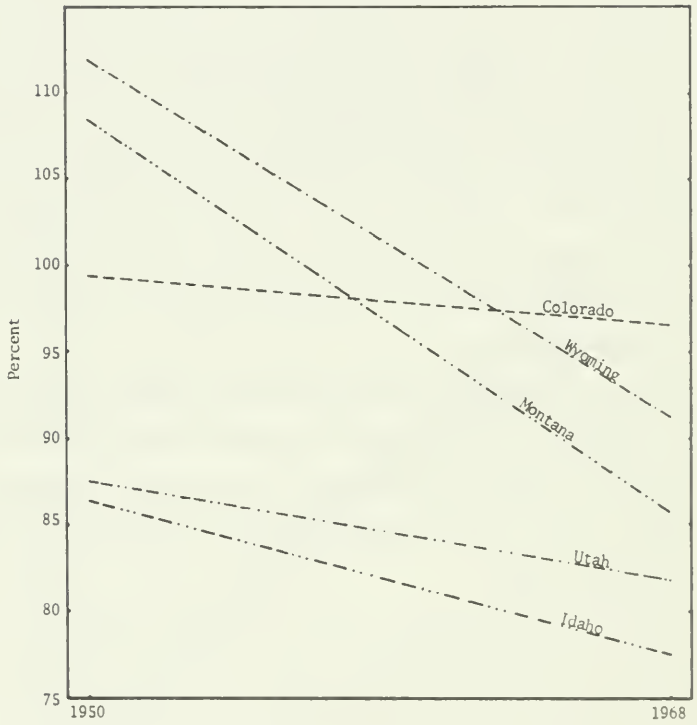
Montana's relative decline can also be seen in figure 1.4, which shows, for each of the Rocky Mountain states, per capita personal income as a percentage of the United States average in both 1950 and 1968. In all five states, per capita income fell relative to the national average, but the decline was steepest in Montana.

Other Nearby States

The Rocky Mountain region does not include North Dakota, South Dakota, or Washington, three neighboring states whose economies are of particular interest to Montanans.

Figure 1.4

Per Capita Personal Income
as a Percentage of United States Average
Rocky Mountain States, 1950 and 1968
(1958 Dollars)



Sources: U.S. Department of Commerce, Office of Business Economics; and Montana Economic Study.

In both North Dakota and South Dakota population grew more slowly between 1950 and 1968 than it did in Montana. This reflects the greater impact of declining agricultural jobs in those two states. As table 1.2 indicates, payroll jobs outside agriculture rose 41 percent between 1950 and 1968 in both North Dakota and South Dakota, compared with an increase of only 32 percent in Montana.

Table 1.2

Population, Employment and Income
Montana and Neighboring States, 1950 and 1968

		1950	1968	Percentage Change 1950-1968
Population (July 1) (thousands of people)	Montana	593	696	17.4
	North Dakota	619	624	0.8
	South Dakota	655	665	1.5
	Washington	2,387	3,296	38.1
Nonfarm civilian payroll employment (thousands of workers)	Montana	149.0	196.1	31.6
	North Dakota	108.7	153.6	41.3
	South Dakota	118.5	167.1	41.0
	Washington	683.7	1,097.0	60.5
Total personal income (thousands of 1958 dollars)	Montana	$1,160	$ 1,719	48.2
	North Dakota	943	1,443	53.0
	South Dakota	981	1,591	62.2
	Washington	4,819	10,186	111.4
Per capita personal income (1958 dollars)	Montana	$1,957	$ 2,470	26.2
	North Dakota	1,523	2,313	51.9
	South Dakota	1,499	2,392	59.6
	Washington	2,019	3,090	53.0

Sources: U.S. Department of Commerce, Bureau of the Census and Office of Business Economics; U.S. Department of Labor, Bureau of Labor Statistics; and Montana Economic Study.

Notes: Employment excludes self-employed workers and all household workers. Montana employment adjusted to eliminate the effects of a copper strike in 1967-1968.

Per capita income was substantially lower in both Dakotas than in Montana in 1950. Between 1950 and 1968, however, real per capita personal income increased 52 percent in North Dakota and 60 percent in South Dakota, compared with an increase of only 26 percent in Montana. As a result, Montana's per capita income was only 6 percent above North Dakota's, and only 3 percent above South Dakota's, by 1968. Thus, although Montana's population grew faster than did that of the Dakotas over these 18 years, its per capita income grew much more slowly.

In Washington, population increased 38 percent between 1950 and 1968, more than twice as fast as it did in Montana. Civilian payroll

employment outside agriculture increased by a full 60 percent. Most of the spark was provided by 107,500 new jobs in manufacturing, including 85,000 in the aircraft industry. Washington's real per capita personal income rose 53 percent between 1950 and 1968, more than twice as fast as it did in Montana, and by 1968 per capita income in Washington was 25 percent higher than it was in Montana.

When Montana is compared with these three states, just as when it is compared with the states of the Rocky Mountain region, what stands out most vividly is the slow growth of Montana's per capita income. In fact, among all of the 48 conterminous states (Alaska and Hawaii were not states in 1950), Montana ranked next to last in terms of growth of per capita personal income between 1950 and 1968.

It is, of course, important to bear in mind that these figures are averages. There were areas within the state where opportunities were plentiful, and it was possible for numerous Montanans with ability, imagination, and a modicum of good luck to do very well for themselves during these years.

But the aggregate data make an unmistakable point: by and large, Montana's economic performance during the 1950s and 1960s was anemic, and overall the state and its citizens received far less than a full share of either national prosperity or the prosperity of the region.

Factors Behind Montana's Slow Growth

Chapters 2 and 3 of this study inquire systematically into the reasons for the sluggish growth of Montana's population, employment, and income between 1950 and 1968. They show that, although the forces at work during the 1950s were different from those that shaped the events

of the 1960s in several respects, both periods were dominated by a slow growth of employment opportunities. Although the following discussion is based on the findings of Chapters 2 and 3, it is too brief to do justice to the detailed analysis presented in those chapters, and interested readers are urged to read them in full.

Population and Employment. Between 1950 and 1960, the nation's population increased 18 percent; Montana's population increased 14 percent (from 591 thousand to 675 thousand). The unusually rapid rate of increase in the national population was due mainly to the very high birth rates of the early 1950s.

The difference between Montana's rate of population growth and the national one did not trace to a disparity of birth and death rates, but rather to a substantial excess of people moving out over people moving in. Over the decade, net out-migration averaged about 2,500 persons per year.

The evidence does not indicate that people left because it was too cold, or because they failed to appreciate the way of life here. There were simply not enough jobs to support them. According to our estimates, total jobs in Montana rose from 229 thousand in 1950 to 237 thousand in 1960, or about 3 1/2 percent. Nationally, employment rose nearly 13 percent over the same period.

We estimate that for net out-migration and rising unemployment to have been averted, the number of jobs in Montana would have had to rise more than three times as fast as it did during the 1950s. Net out-migration, then, was due to a large "job gap"--a failure of jobs to grow as fast as the "natural" growth of the state's labor force.

During the 1960s, population growth slowed, both nationally and in Montana. Birth rates declined sharply and, in Montana's case, population

out-migration intensified. Nationally, population rose 11.0 percent between 1960 and 1968. According to Census Bureau estimates, the number of people in Montana increased by only 2.5 percent between July 1, 1960 and July 1, 1968. (The final tabulation from the 1970 Census, which was not available until after our study had been completed, showed that Montana's population on April 1, 1970 was 694,409, up 2.9 percent from April 1, 1960. This final tabulation does not call into serious question the estimate of 696 thousand for July 1, 1968, a figure used extensively in our work. Census Bureau estimates indicate that, after reaching a peak of 705 thousand in 1964, the state's population declined slowly for the rest of the decade.)

The 1960s were years of enormous economic growth nationally. After stumbling through a series of recessions in the 1950s and early 1960s, the U.S. economy got moving. Unemployment, which had risen to intolerably high levels in the late 1950s and averaged 6.7 percent in the recession year 1961 had been reduced to a more reasonable 4.6 percent by 1965. By 1968, it had fallen to only 3.6 percent, and the sustained increase in total demand that had brought this decline in unemployment was posing a serious inflationary problem. (As of August 1970, policies designed to combat inflation had pushed seasonally adjusted unemployment up to 5 percent nationally. Regrettably, the Employment Security Commission of Montana has recently stopped publishing seasonally adjusted unemployment for Montana. However, based on past seasonal patterns, it appears that Montana's seasonally adjusted unemployment rate was about 6 percent in August.)

Over the 8 years 1960-1968, total civilian employment in the nation increased 15.1 percent; this reflected the combined influences of falling

unemployment and a rapid growth of the labor force as the postwar baby crop began to reach working age.

In Montana, too, the rate of growth of employment picked up. Between 1960 and 1968, total jobs rose by 7.4 percent. But the increase in jobs in Montana was not nearly enough to accommodate the rapid "natural" growth of the labor force. The result was that workers migrated out of the state even more rapidly than they had during the 1950s.

The main reason that population grew so much more slowly in Montana than it did nationally was, again, the failure of Montana's economy to provide enough new jobs. In fact the job gap--the difference between the number of jobs necessary to absorb the growing labor force and the number that actually materialized, increased during the 1960s.

The detailed analysis of Chapter 2 shows that throughout the period 1950-1968 the slow growth of jobs was due to the nature of Montana's industry. The state specializes in only a few major export industries (industries that depend on national or international markets): agriculture, mining, forest products, and railroading. Actually, these "primary" industries provide far less than half of total jobs in the state, but they are the driving force behind economic growth (or decline).

In every one of these industries--agriculture, mining, forest products, and railroads--national employment has declined sharply since World War II. As Chapter 2 points out, the declines reflect rapid increases in productivity per-worker due to technological advances. Actually, employment in Montana held up better than might reasonably have been expected. Only in mining did the number of jobs in the state fall faster than it did over the nation as a whole. In agriculture, Montana's loss of jobs was substantially less, in percentage terms, than

it was nationally. Railroad employment fell at about the same rate in Montana as it did nationally. And employment in Montana's lumber industry increased sharply, even though forest products jobs declined nationally.

Nonetheless, Montana's overall employment in these critical primary industries dropped substantially during the 1950s, and remained about constant during the 1960s. Most of the increase in national primary employment came in manufacturing industries that are either missing entirely or not very important in this state.

Fortunately for people who were looking for work in Montana, there was a substantial shift, both in the state and across the nation, toward what Chapter 2 labels "derivative" employment. This includes jobs in industries catering mainly to local markets, including wholesale and retail trade; the service industries (barbershops, laundries, hotels and motels, and the like); finance, insurance, and real estate; truck, bus, and air transportation; construction; and state and local government. The shift toward derivative employment, which is still going on and can be expected to continue, offset part of the impact of the decline in primary employment, and caused total jobs to grow even as primary jobs fell.

The fact remains, however, that the state's labor market provided far too few jobs--primary or derivative--to absorb the natural increase in the labor force. Chapter 2 analyzes the resulting heavy net out-migration in detail. One of the most striking findings is that the rate of net out-migration of young male college graduates was much higher than that for other age-sex-education groups. Census data for 1950-1960 thus confirm the oft-heard complaint that the state loses a disproportionate share of its most talented young people.

The Slow Growth of Income. In 1950, Montana accounted for 0.425 percent of the nation's total personal income. By 1968, this share had fallen to 0.300 percent, or by nearly one-third. One reason, of course, was that Montana's employment, which accounts for most of personal income, rose so slowly. But, as has already been pointed out, per capita income in the state also grew at a miserable pace during these 18 years.

According to the analysis presented in Chapter 3, the major factors behind the slow growth of per capita income were: (1) a decline in real income per worker (including both self-employed and hired workers) in agriculture, despite an increase nationwide, (2) a failure of income per worker in nonagricultural pursuits to rise as fast in the state as it did nationally, and (3) a substantial decline in the proportion of the population at work, which meant that the ratio of people who had to be supported (and, in the case of youngsters, educated) to those who were at work increased.

The decline of real income per worker in agriculture reflected the unfortunate course of prices for livestock and grain, Montana's two major agricultural exports.

The below-average increase of real income per worker outside agriculture reflected in part a shift of workers away from higher-paying jobs--especially in mining and railroads--toward the lower-paying ones, especially in derivative industries. It also reflected the simple fact that there was an excess supply of labor in the state, which helps to explain why earnings rose less rapidly here than they did nationally, where there was more competition for workers.

Montana's ratio of employment to population was about 5 percent below the national average in 1950, but by 1968 it had fallen to 8 percent below

the national average. The relative decline occurred mainly during the 1950s. According to data presented in Chapters 2 and 3, it reflects primarily heavy out-migration of young persons who had reached working age, but did not yet have children.

WHAT WILL THE FUTURE BRING?

Does the future hold more hope? We have endeavored to look ahead to 1980, and Chapter 4 gives detailed projections of population, employment, and income in that year.

National projections published by the National Planning Association, a private organization in Washington, D.C., are used as a background. NPA foresees a prosperous decade ahead for the country as a whole. Gross national product--total output of goods and services--is expected to increase at an average annual rate of 4.2 percent between 1968 and 1980, after correction for price level changes. This is only slightly below the remarkable 4.8 percent rate of increase of real GNP between 1960 and 1968. Unemployment in 1980 is projected at 3.7 percent of the labor force, much lower than it has been in early 1970, and nearly as low as it was in 1968. Per capita personal income for the United States in 1980 is projected at $4,204 in 1958 dollars, 46 percent higher than it was in 1968.

It would be pleasant to report that we expect Montana, at long last, to share fully in this national prosperity. But our guess is that it will not.

Table 1.3 summarizes our Montana projections. We project that population will have risen to 725,000 in 1980, about 4 percent above its 1968 level. For the nation, NPA foresees a much faster increase in population, and our Montana projection implies continued heavy net out-migration.

Table 1.3

Resident Population and Total Civilian Employment
Montana, 1950, 1960, 1968 and Projected 1980

	Thousands of Persons or Workers				Percentage Change		
	1950	1960	1968	Projected 1980	1950-1960	1960-1968	1968-1980
Resident population (July 1)	593	679	696	725	+14.5	+2.5	+4.0
Total civilian employment (average monthly)	228.5	236.9[a]	254.4[a]	278.4	+ 3.7[a]	+7.4[a]	+9.4[a]

Sources: U.S. Department of Commerce, Bureau of the Census; Montana Employment Security Commission; and Montana Economic Study. Projections by Montana Economic Study.

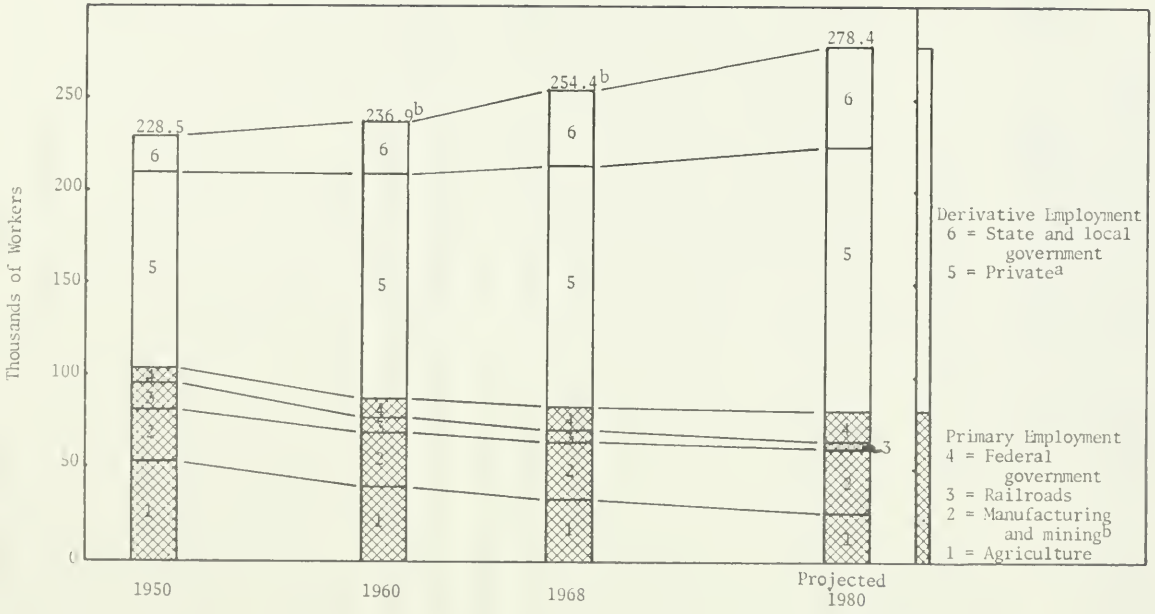
[a]Adjusted to eliminate effects of copper strikes of 1959-1960 and 1967-1968.

The reason that we project population to grow so slowly is that we expect total civilian employment to rise only about 9 percent from 1968 to 1980, to about 278 thousand in the latter year. This is well below the increase in jobs that would be needed to absorb the "natural" increase in Montana's labor force.

Some details of our employment projection can be seen in figure 1.5. Among the primary industries, agricultural employment is expected to decline further, as are railroad jobs. Employment in manufacturing and mining, however, is expected to increase somewhat, a prediction based partly on our assumption that at least three new open-pit copper mines will be established during the 1970s. This expectation, in turn, rests on an assumption that the market for copper will continue to be good, as it has been recently. The projected increase in mining employment also reflects our expectation that strip-mining of low-sulphur coal will increase as enormous reserves (located in Rosebud County) are brought into increased production. The growth of manufacturing employment includes

FIGURE 1.5

Civilian Employment
Montana, 1950, 1960, 1968, and Projected 1980



Sources: Payroll employment from Montana Employment Security Commission, agricultural employment estimated by Montana Economic Study, projections by Montana Economic Study.

[a]Private derivative employment includes payroll workers in: nonrail transportation; contract construction; wholesale and retail trade; finance, insurance, and real estate; services; and all nonfarm proprietors and household workers.

[b]Adjusted to eliminate the effects of copper industry strikes on employment in metal mining and primary metals manufacturing in 1959-1960 and 1967-1968.

new jobs in the forest products industry, which was the major source of increase in primary employment during the 1960s. Federal government employment, another important source of new jobs between 1950 and 1968, is also expected to increase rapidly.

Overall, however, these increases barely offset the projected declines in agricultural and railroad jobs, and total primary employment is projected to change very little. Derivative employment, on the other hand, is expected to continue increasing, as it has in the past. Especially noteworthy is our projection of a continued rapid increase in the number of state and local government jobs.

Table 1.4

Total Personal Income and Per Capita Personal Income
Montana and United States, 1960, 1968, and Projected 1980
(1958 Dollars)

	Total Personal Income					Per Capita Personal Income				
	Millions of Dollars or Percent			Average Annual Percentage Rate of Change		Dollars or Percent			Average Annual Percentage Rate of Change	
	1960	1968	1980	1960-1968	1968-1980	1960	1968	1980	1960-1968	1968-1980
Montana	$ 1,344	$ 1,719	$ 2,415	3.1	2.9	$1,979	$2,470	$3,331	2.8	2.5
United States	$387,489	$576,477	$985,644	5.1	4.6	$2,153	$2,885	$4,204	3.7	3.2
Montana as a percentage of United States	.35	.30	.25			92	86	79		

Sources: U.S. Department of Commerce, Office of Business Economics, and Montana Economic Study. Montana projections Montana Economic Study. United States projections by National Planning Association.

Note: United States data includes Alaska and Hawaii.

As table 1.4 indicates, we project that Montana's total personal income (measured in dollars of 1958 purchasing power) will reach $2.4 billion in 1980, up about 40 percent from 1968. This represents 0.25 percent of NPA's projected total personal income for the nation as a whole. The continued decline of Montana relative to the rest of the country that is implied by our projection may be appreciated by recalling that in 1968 Montana accounted for 0.30 percent of the nation's personal income.

Per capita personal income of Montanans will be $3,331 in 1980, according to our projections, 35 percent higher than it was in 1968, but 21 percent below the national average projected by NPA for 1980.

Our projections, then, do not foresee a reversal of Montana's decline relative to the nation as a whole. Unless we are badly mistaken, employment in Montana will continue to grow too slowly to provide adequate employment opportunities for the growing work force and thousands of persons will have to move elsewhere to find jobs. In this setting, the state's unemployment rate will probably remain above the national average.

Perhaps most important of all, however, is our expectation that Montana's per capita income will continue to grow less rapidly than the national average.

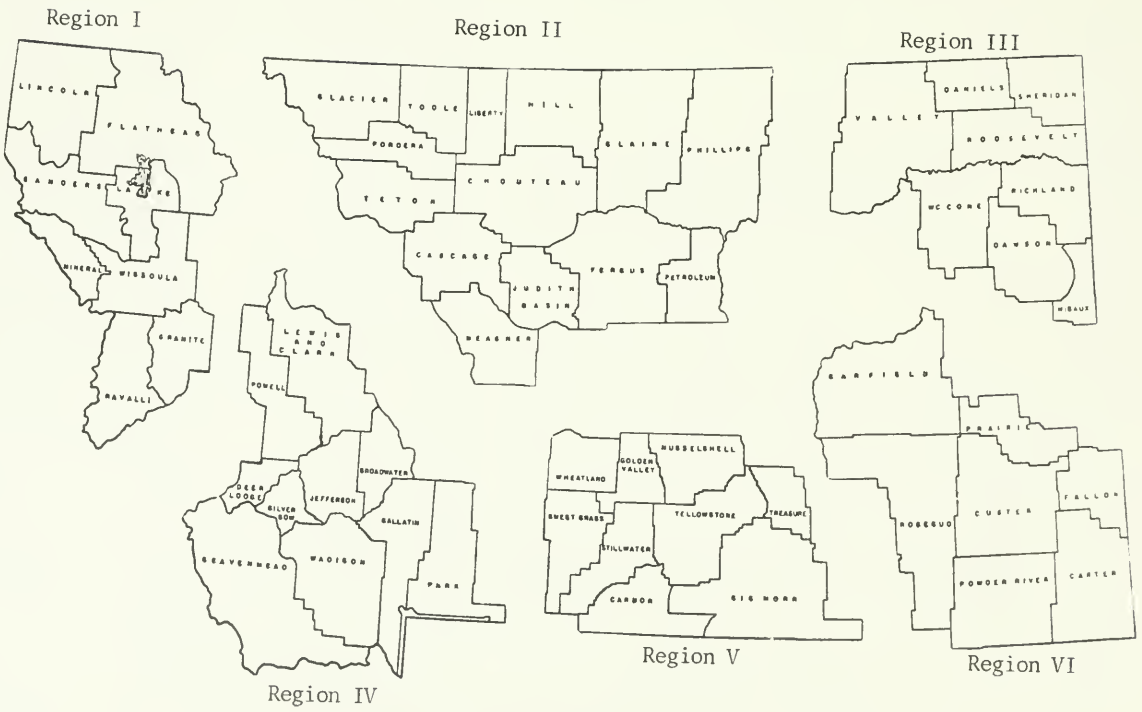
It should be stressed that we are not predicting a depression for Montana. In the immediate years ahead, as in the past, there will be impressive opportunities for talented people who are in the right place at the right time. And a vast majority of Montanans can expect to enjoy a standard of living that is high by either historical or international standards. But our projections do imply that, on average, Montanans will continue to share less than fully in national prosperity, at least insofar as prosperity is accurately measured by the trend of employment and per capita income.

MONTANA'S ECONOMIC REGIONS

Montana is not only geographically large; it is also diverse, embracing several distinct economic regions. Chapter 5 analyzes differences among the six regions shown in figure 1.6. Here, the

FIGURE 1.6

Montana Economic Regions



findings of Chapter 5 are summarized briefly. It should be emphasized that data relating to these regions are, for the most part, much less reliable than those for the state as a whole. In particular, the regional employment numbers include some rough allocations made necessary by lack of regional detail in some of the official figures compiled by the Employment Security Commission.

1950-1968

Table 1.5 shows estimated population and employment for each region in 1950 and 1968, together with our projections for 1980. Between 1950 and 1968, both population and employment tended to increase most rapidly in regions that depended least heavily on agriculture. Region I, northwestern Montana, grew most rapidly; its population increased 33 percent, and employment 32 percent, over the 18-year period. Net migration between 1950 and 1968 was approximately zero.

All other regions experienced net out-migration. Nonetheless, in Region V (the south central portion of the state), the increases in both population and employment were substantial--21 percent and 26 percent, respectively. This reflected the rapid growth of the Billings-Laurel area (Yellowstone County); every other county in Region V except Big Horn experienced a decline in population.

Population in Region II, north central Montana, also grew substantially--by 19 percent between 1950 and 1968. The growth of civilian employment was a much smaller 10 percent. The large discrepancy between rates of growth in population and civilian employment reflects the fact that a substantial share of the population growth was caused by the increase in military personnel stationed in the region, especially at Malmstrom Air

Table 1.5

Population and Civilian Employment
Montana Economic Regions, 1950, 1968, and Projected 1980

		Thousands of Persons or Workers			Percentage Change	
		1950	1968	Projected 1980	1950-1968	1968-1980
Region I	Population	114.5	152.0	171.1	+32.8	+12.6
	Employment	42.8	56.5	65.5	+32.0	+15.8
Region II	Population	141.8	168.4	167.7	+18.8	- 0.4
	Employment	55.5	61.2	63.0	+10.3	+ 2.9
Region III	Population	56.2	60.5	51.9	+ 7.7	-14.2
	Employment	20.7	20.3	18.7	- 1.9	- 8.0
Region IV	Population	149.3	163.0	174.7	+ 9.2	+ 7.2
	Employment	60.5	58.0	64.9	- 4.1	+11.9
Region V	Population	96.3	116.0	125.3	+20.5	+ 8.0
	Employment	36.6	46.2	53.2	+26.2	+15.0
Region VI	Population	32.9	33.1	34.4	+ 0.6	+ 3.9
	Employment	12.5	12.3	13.2	- 1.6	+ 7.7
State	Population	591.0	693.0	725.0	+17.3	+ 4.6
	Employment	228.5	254.4	278.4	+11.3	+ 9.4

Sources: U.S. Department of Commerce, Bureau of the Census; Montana Employment Security Commission; and Montana Economic Study.

Notes: State population figures are April 1 (census) estimates.

State employment figures are adjusted to eliminate the effects of a copper strike in 1967-1968.

Force Base near Great Falls. These military personnel are not included in the civilian employment figures, but they and their families are covered by the population statistics.

Infusions of airmen and their families also accounted for a substantial increase in population of Region III, the northeastern portion of the state, during much of the period under review. But by July 1968, the

date to which the Census Bureau's 1968 population estimates refer, most of the personnel stationed at Glasgow Air Force Base had departed. The drastic influence of the closing of the base makes the 1968 population estimate for Region III particularly uncertain.

Region IV, southwestern Montana, grew very slowly between 1950 and 1968, largely because of the decline in mining employment in and around Butte. In Region VI, the southeastern portion of the state, the increase of population was barely perceptible and employment fell 2 percent.

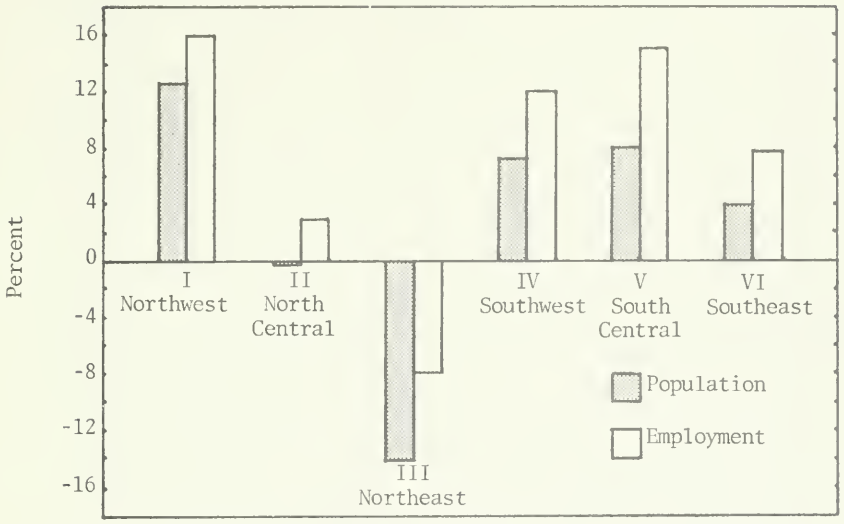
Projections

As table 1.5 and figure 1.7 indicate, we expect Region I (northwest) to continue to grow more rapidly than any other between 1968 and 1980 (though not as fast as it did between 1950 and 1968). In terms of employment, but not population, we expect Region V (south central) to come in a very close second. We also project substantial growth (substantial, that is, for Montana) in Region IV, partly because we foresee a reversal of the downward trend in mining jobs. For Region VI (southeastern), we project a reversal of the slight decline in employment that occurred during 1950-1968. This is due partly to a projected increase of jobs in strip mining for coal.

For two regions, we project population declines. In Region II (north central), where population rose nearly one-fifth between 1950 and 1968, the population for 1980 is projected to fall by a scant 0.4 percent from the 1968 level. The main reason for this decline is a projected increase in jobs of less than 3 percent--not quite enough to absorb the increase in the work force that could be expected to occur if total population in the region were to remain stable.

Figure 1.7

Percentage Change in Population and Civilian Employment
Montana Economic Regions, Projected 1968-1980



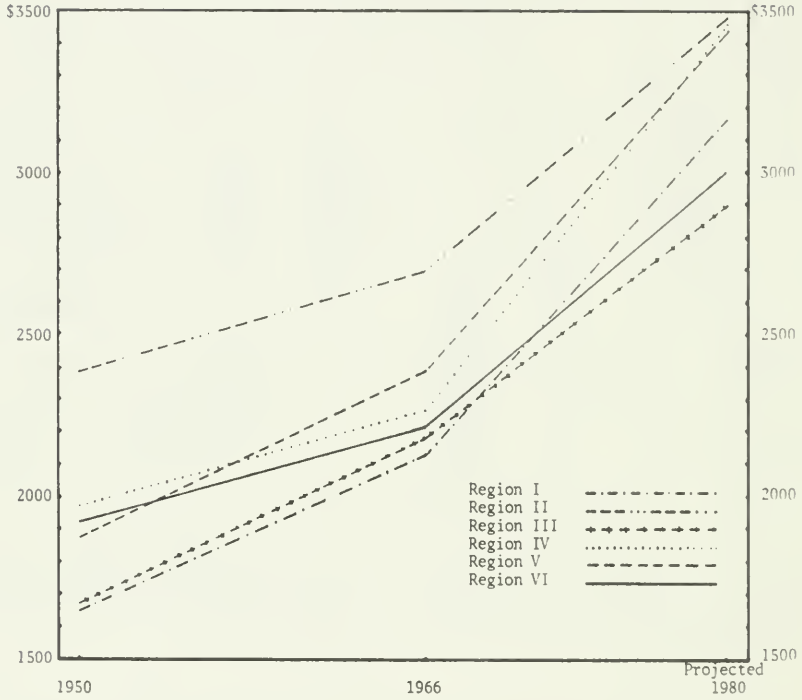
Sources: U.S. Department of Commerce, Office of Business Economics; Montana State Board of Health; Montana Employment Security Commission; and Montana Economic Study. Projections by Montana Economic Study.

For Region III (northeast), we project a substantial 14.2 percent decline in population, and an 8.0 percent decline in employment. In part, these projected declines are based on an assumption that the depressing effects of closing Glasgow Air Force Base were not fully registered in the 1968 statistics. It also obviously reflects our assumption that there will be no new source of employment sufficient to replace the stimulation provided by the Base.

Figure 1.8 shows per capita personal income in each of the six regions for 1950, 1966 (the last year for which regional estimates are

Figure 1.8

Per Capita Personal Income
Montana Economic Regions, 1950, 1966, and Projected 1980
(1958 Dollars)



Sources: U.S. Department of Commerce, Office of Business Economics; and Montana Economic Study.

available), and 1980 as we project it. All figures are in dollars of 1958 purchasing power. Per capita income in Region II (north central) was much higher than in any other region in both 1950 and 1966; we expect this region to continue to rank first in 1980, but its advantage, very large in both 1950 and 1966, is expected to narrow nearly to the vanishing point. Regions V (south central) and IV (southwest), which ranked second

and third in 1966, are both expected to have per capita incomes nearly as large as that of Region II by 1980. The projected per capita income figure for Region II is $3,481 (in 1958 dollars), compared with $3,464 for Region IV and $3,448 for Region V.

The major reason for the narrowing of this gap is that Region II depends more heavily on agricultural income than do the other two areas. Although we expect north central Montana's large-scale farming units to continue to produce above-average incomes per farm worker, we project little increase in income per farm worker. In both Regions IV and V, the influence of projected rising incomes per worker in nonagricultural pursuits will have a greater effect, because nonfarm industry is more important in these regions.

We project that in 1980, Region I (northwest) will have moved from last to fourth rank in terms of per capita personal income, passing Regions VI (southeast) and III (northeast) which are much more dependent on agriculture. Projected 1980 per capita personal income (in dollars of 1958 purchasing power) for Region I is $3,164; for Region VI it is $2,998; and for Region III it is $2,898.

One final observation should be made. As the figure shows, for every region the increase in real per capita personal income is expected to be greater between 1966 and 1980 than it was during the preceding 16 years. It should be remembered, however, that the state's real per capita income hardly changed between 1950 and 1960; nearly all of the increase over the 18 years 1950-1968 came after 1960. We do not have data on personal income by counties for 1960; 1959 data are available, and may be found in Chapter 5. (Because 1959 was an unusually bad year

for agriculture in most parts of the state, the figures for that year give a misleading impression of the trend of the 1950s and it seems better to leave them out of the summary chart used here.) For each of the regions, as for the state as a whole, we expect the years immediately ahead to be more like the 1960s than the 1950s as far as per capita income growth is concerned.

POVERTY AND UNEMPLOYMENT

Judging from the statistics on average income we have cited, Montanans may not be sitting on top of the world, economically, but neither does it appear that they are indigent. Averages conceal, however, about as much as they reveal. Many Montana families do in fact find themselves in what most persons would consider dire straits. Like the nation, Montana has not come anywhere near solving its poverty problem.

Unfortunately, the latest figures on the distribution of income among Montanans in which we are willing to place much faith are now more than a decade old. They come from the 1960 Census of Population, which quizzed a large sample--about 25 percent of the entire population--about their incomes for calendar year 1959. The 1970 Census gathered similar information about incomes in 1969, but the results are not yet available. Until they are, we are forced to draw our conclusions from the 1959 data.

What the 1960 Census revealed was depressing. As table 1.6 indicates, one-fifth of the Montana families sampled reported 1959 incomes under $3,000. That figure, it will be recalled, is the original poverty line for families used by the federal government in connection with its anti-poverty programs.

Table 1.6

Percentage Distribution of Money Income of Families
Montana and United States, 1959

	Montana	United States
Under $3,000	20.2	21.4
$ 3,000- 5,999	38.2	32.8
6,000- 9,999	30.1	30.8
10,000-14,999	8.3	10.5
15,000-24,999	2.4	3.3
25,000 and over	0.8	1.3
All Families	100.0	100.0

Source: U.S. Department of Commerce, Bureau of the Census.

Notes: A family consists of two or more persons living in the same household who are related to each other by blood, marriage, adoption; all persons living in one household who are related to one another are regarded as one family.

Details may not add to total because of rounding.

Some comfort can be gained, perhaps, by noting that the incidence of very low incomes was somewhat higher nationally than it was in Montana. Comparison of the two columns of figures in table 1.6 shows that even though average family income reported in the 1960 Census was lower in Montana than it was nationally, the proportion of Montana families that fell into the under $3,000 class was less than the proportion for the nation as a whole. As is explained in Chapter 6, detailed examination of the income statistics leads to the conclusion that the main reason that poverty was, overall, slightly less serious in Montana than it was nationally is that the state had a lower nonwhite population. (Both in Montana and nationally very low incomes are much more prevalent among nonwhites than among whites.)

The census data reveal that very low incomes were least common among families in "urban" areas (places, incorporated or not, having populations of 2,500 or more), and most common among farm families (see table 1.7). Rural nonfarm families fell in between.

Table 1.7

Percentage Distribution of Money Income of Families and Median Family Income, Urban and Rural Areas Montana and United States, 1959

	Montana			United States		
	Urban	Rural Nonfarm	Rural Farm	Urban	Rural Nonfarm	Rural Farm
Under $3,000	15.2	22.4	31.7	16.4	28.9	47.1
$ 3,000- 5,999	36.0	41.9	38.1	31.7	36.8	31.3
6,000- 9,999	35.2	27.9	18.1	34.1	25.2	14.8
10,000-14,999	10.1	5.9	7.6	12.3	6.6	4.6
15,000-24,999	2.8	1.5	3.3	3.9	1.8	1.6
25,000 and over	0.8	0.5	1.2	1.5	0.7	0.6
All Families	100.0	100.0	100.0	100.0	100.0	100.0
Median Income	$5918	$5050	$4289	$6166	$4750	$3228

Source: U.S. Department of Commerce, Bureau of the Census.

Note: Details may not add to total because of rounding.

Nearly one-third of farm families reported incomes under $3,000, compared with about one-fifth of rural nonfarm families, and less than one-sixth of urban families.

It should be kept in mind, of course, that living costs are generally higher in the cities, and that residents of rural areas, especially those who live on farms, enjoy some kinds of nonmonetary income (such as home-grown food) not available to most urban residents. The census data include only money income.

Still, the differences are sufficiently striking to establish the fact that Montana's poverty problem, at least in 1959, was more serious in rural than in urban areas.

Census figures on incomes according to the occupation of the head of the family reveal what one would expect--that the incidence of very low incomes was highest for families of unskilled workers. The problem was most severe for families headed by farm laborers, where 41 percent reported 1959 incomes under $3,000, and for families headed by household workers, where the proportion reached an astounding 71 percent.

The census data confirm another commonsense expectation--that low incomes are associated with low educational attainment. Better education has many virtues, of course, and some of the most important ones are intangible. But an impressive array of evidence, including that from the census, supports the proposition that one of the most notable effects of increased years of schooling is that it enhances human productivity, and hence income. Traveling around the state, one gets an impression that this indisputable fact and its implications are better understood in the large cities of Montana than they are in many rural areas.

Within Montana, poverty is more common in the southeastern part of the state than in any other region. According to the census, 27 percent of all families in this area had incomes below $3,000 in 1959. For Garfield County, the figure was 46 percent, higher than in any other county in the state.

Neighboring Region III (northeastern Montana) showed up little better. Twenty-six percent of its families reported incomes under $3,000, and in Wibaux County, the figure was 44 percent.

In the other regions, very low incomes were considerably less common. In Region I, western Montana, slightly over one-fifth of all families had incomes under $3,000 in 1959. In all of the other three regions, the proportion was slightly less than one-fifth. But even one-fifth represents a distressingly large number of families.

Perhaps most striking of all was finding that among Montana's only large minority group, Indians, one-half of all families reported incomes under $3,000. This one fact is ample proof that most Indians seldom taste the fruits of the affluent society.

Unemployment

Most of the time since World War II the American economy has operated at, or near, "full employment." Exactly what constitutes full employment is debatable, as politicians (as well as economists) have discovered. In general, what economists have in mind is a level that allows for joblessness due to normal frictions of the market. Some people will always be out of work temporarily if there is to be any freedom to change jobs. Attempts to stimulate the economy so as to push unemployment any lower than this "normal" level--generally thought to be between 3.5 and 4.5 percent for the United States--can only lead to inflation. But higher rates of unemployment call for national policies to stimulate the economy.

The fact is, however, that the average rate of unemployment, like average income, can be a misleading figure. There are (and always have been, so far as we know) pockets of unemployment, just as there are pockets of poverty. Even when the economy is at what is called "full employment,"

some regions, and some classes of workers, are still afflicted by lack of available work.

Montana, in recent years, has had excessive unemployment. Data on people out of work are not very detailed, and were practically nonexistent until the Employment Security Commission of Montana began publishing figures regularly in 1957. Chapter 6 sets forth detailed information about unemployment from the 1960 Census and Employment Security data.

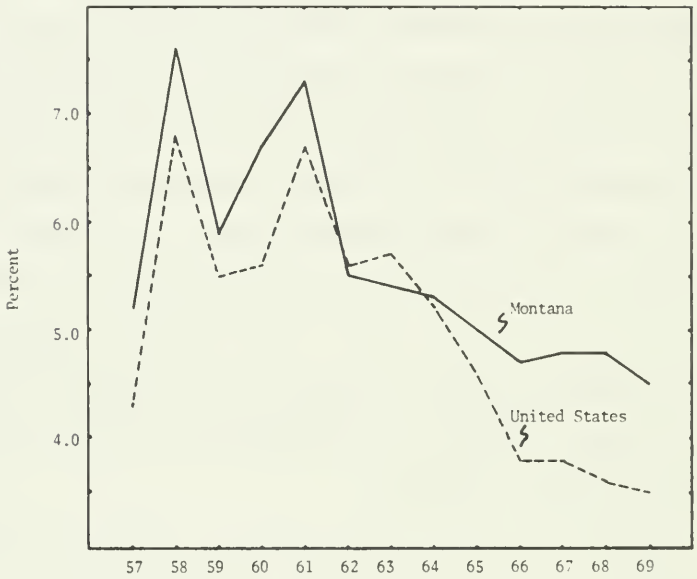
The 1950 Census had revealed that Montana's unemployment rate was 5.1 percent in April 1950, the same as the national rate in that month. By the late 1950s, however, when the state data became available on a monthly basis, unemployment in Montana (after adjustment to eliminate the influence of seasonal factors) was hovering well above the national rate, which itself was excessive.

Figure 1.9 shows that during the early 1960s Montana's unemployment rate followed (and for a brief period, led) the national one down, as the effort to move the U.S. economy back toward full employment through stimulating fiscal and monetary policies began to take hold. But by the mid-60s Montana's unemployment rate stabilized, more or less, and during the past few years it has remained stubbornly above the national unemployment rate by an average of about one percentage point.

Seasonal swings in Montana's unemployment are substantial, as one would expect. In 1967, for example, unemployment reached a low of 3.3 percent of the labor force in October, and then rose to a high of 6.3 percent the following February. But the severity of seasonal unemployment is not nearly as great as it was a decade ago. In July 1959, for example,

Figure 1.9

Unemployment as a Percentage of the Civilian Labor Force
Montana and United States, 1957-1969



Source: Montana Employment Security Commission.

the unemployment rate was 3.0 percent. By February 1960, it had risen to 10.9 percent, far greater than the seasonal highs of recent years.

The 1960 Census data revealed that unemployment was more severe in April of that year for nonfarm rural workers than it was for urban workers, and that it was extremely low for farm residents. The latter result is to be expected, since April is a busy month for farmers and ranchers, and since the definition of an unemployed person--one who is out of work and looking for a job--naturally excludes most farmers even if they are idle in the off-season.

People who are unemployed much of the time are likely to have low incomes, but the converse doesn't necessarily hold. The lowest unemployment rate in April 1969 was in Wibaux County, which, as we have pointed out, also had the second highest proportion of families with incomes under $3,000 in 1959.

The 1960 Census found that unemployment was most serious in Region I (northwestern Montana) and least common in Region VI (southeastern Montana). However, since the figures were only for one month, they may have reflected seasonal peculiarities more than fundamental differences.

One very important inference drawn in Chapter 6 is that the seasonality of employment in Montana may go a long way toward explaining two seemingly conflicting facts. Available data on wages in manufacturing indicate that wage rates are higher in Montana than they are nationally. So are the weekly earnings of manufacturing workers. But annual incomes of these same workers are below the national average. The apparent discrepancy probably reflects the more seasonal nature of Montana jobs, particularly in the forest products industry.

POLLUTION AND ENVIRONMENTAL QUALITY

Montana, along with the rest of the nation, and the world for that matter, faces serious threats to the quality of its environment. This is nothing new, but today's widespread public concern with environmental problems is part of a national awakening that is a no flash-in-the-pan. Man's ability to upset the balance of nature has increased enormously in recent years, thanks to the same staggering technological advances

that have increased measured income so much. The current level of affluence has not only entailed new threats to the environment; it has also furnished the economic security that permits the middle classes the "luxury" of worrying about the impact of their way of life on the world in which they live. Once the middle classes become deeply concerned about a problem, action is likely to follow, and we see no reason to suppose that concern about the environment will wither.

The major concern at present is with pollution, although other aspects of environmental quality (such as timber-cutting practices and the preservation of wilderness) also command attention.

There are solid reasons to be concerned about pollution in Montana. Chapter 7 surveys the problems in some detail.

Frequent temperature inversions turn much of the western part of the state into what is classified as a "frequent smog zone." In and around Missoula, industrial wastes--especially from lumber, wood products, and paper products--together with nonindustrial sources of particulate matter (including dust from city streets) have created a serious problem. Suspended particulate in the air exceeds the standard set by the State Board of Health much of the time.

Missoula, so far as we know, is the only place in the state whose pollution problem has repeatedly received major national publicity. But it is not, as Montanans know, the only place with air pollution problems. Butte and Anaconda, Columbia Falls, Garrison, and East Helena all face serious pollution of one kind or another. Nor do the major cities of the plains, Great Falls and Billings, escape the problem.

The state's Air Pollution Control Law, passed in 1966, enpowers the State Board of Health to set minimum ambient air quality standards and emission control standards, and to require licenses for potentially damaging new industrial installations. It also provides for the establishment of local pollution control programs. (So far, Missoula, Great Falls, and Billings have established them.) The Board of Health has already set ambient air standards for airborne particulate, various sulfur compounds, fluoride, lead, and beryllium. Standards for other pollutants may be set in the future. These standards are not always met, of course; but when they are exceeded the situation is deemed to be serious. The Health Department has also set emission standards for various business activities and processes that pose pollution threats, and substantial progress has been made in bringing about compliance with these standards.

What effect the air pollution control program will have in the long run is uncertain. Like any other kind of governmental regulation, pollution control is difficult business. The main dangers are that it will be ineffective, on the one hand, or will force needless inefficiencies on the other.

The state also has water pollution problems. In recent years there has been less public attention given to water quality than to air quality. It is to be expected that water pollution problems will receive more notice in the future as the air pollution problem is brought better under control.

The state's water pollution control law was passed in 1955. One notable achievement has been a marked improvement in the Yellowstone

River, where pollution control efforts have been under way since the 1950s. Industrial pollution of the Clark Fork near Butte and Anaconda has also been brought largely under control. But there do remain problems of spillover from settling ponds during windstorms, and of keeping pollution control equipment operating during copper industry strikes. Wastes from wood and paper plants near Missoula also cause some water pollution problems. In addition, the spotlight has recently been turned on agricultural sources of pollution, particularly in connection with feedlots and fertilizers and on contamination from various chemical sprays. Municipal sewage also causes problems in some areas.

One of the most important tasks faced by those who are attempting to guide Montana's economic development is to take into account the "diseconomies" of pollution. Chapter 7 includes an extensive discussion of the economics of protecting the environment.

CLIMATE, RECREATION, AND THE EFFECTS OF SCATTERED POPULATION

Montana's natural setting has shaped its economic and cultural development profoundly. The influences of geography on the way of life in the state should not be ignored in an economic study, even though many of them cannot be measured by the usual economic yardsticks.

Chapter 8 takes a look at Montana's climate and its abundant recreation opportunities, and considers some of the problems posed by the state's low population density. Here we shall only touch on the findings reported there.

Climate

To watch television, one would think that Montanans suffer enormously during winter. West Yellowstone and, to a lesser extent, some communities

along the High Line, receive a lot of publicity on weather reports all over the country. Even many Montanans are convinced that they inhabit the nation's deep freeze.

To be sure, winter temperatures do reach spectacular lows in some areas. But statistics indicate that much of Montana is little if any more uncomfortable during the winter than most of the heavily populated northeastern part of the country. The very aridity that holds down agricultural production makes both summer heat and winter cold more bearable.

In terms of official statistics, Montana's January "wind chill"--a measure that takes into account both wind and temperature, is roughly the same as it is in Boston, Chicago, Minneapolis, Detroit, and New York City, even though Montana's mean temperature in that month is somewhat lower. In summer, the "discomfort index," which takes into account both temperature and humidity, is considerably lower in Montana than it is in most areas except the west coast, because the air is so dry.

Montana receives more than its share of summer sunshine, particularly in comparison with the eastern portion of the country. In winter, the eastern part of the state also receives abundant sunshine; the more mountainous areas, on the other hand, are cloudy more than half the time.

All in all, in most parts of the state the summer weather is more pleasant than it is in most of the rest of the country. And the notion that many Montanans endure great hardships during winter is simply wrong.

Recreation

Hunting, fishing, boating, horseback riding, camping, skiing, hiking, mountain climbing--all these are uncommonly accessible in Montana. The outdoor life is surely one of Montana's most potent attractions.

Chapter 8, and the staff study underlying it, cite large amounts of data in support of this rather obvious point. For example, 158,000 resident, and 7,000 nonresident big game licenses were sold in 1968. In 1967, it is estimated, 21 percent of elk hunters, and 77 percent of deer hunters got their animals. In 1968, 187,000 fishing licenses were sold. There are 26 ski areas in the state, and the snowmobiling is excellent.

National forests, wilderness areas, and other scenic and recreation sites offer abundant opportunities for campers and hikers. Water recreation areas abound.

At least outside the national parks, recreation facilities are generally uncrowded. Outdoor congestion--long lift lines at ski runs, "campground closed" signs, barbecue-pit smog zones, and congested highways--are less common in Montana than they are in many other areas.

It should be recognized, however, that recreation opportunities are not equally distributed throughout the state. The mountainous, lake-dotted northwestern portion, in particular, is blessed with an abundance of almost every type.

A Note on Tourism

Many Montanans seem to feel that tourism offers the state's greatest hope for economic growth. Tourism represents an export business based on

Montana's attractiveness as a vacation spot. As we define it in Chapter 5 of Part 2 of our Report, the tourist industry embraces any retail trade or service establishment that caters to out-of state visitors who are not here on business.

On the basis of a study conducted in 1963-64, it appears that out-of-state tourists spent between $62 and $70 million in Montana during the 12-months ending July 31, 1964. (Not all of this money ended up in the pockets of Montanans, of course, since some of the sales to tourists consisted of goods produced outside the state.)

According to the travel study, 84 percent, or $50-$60 million of tourist expenditures, went for food and lodging and automobile operation. Sales of firms that meet these needs--hotels and motels, eating and drinking places, service stations, and auto repair and rental shops and garages--amounted to $218 million in 1963. Clearly, the tourist trade is very important to these businesses.

There are few clues as to how rapidly tourist spending is increasing, but available statistics do not indicate that it is rising appreciably more rapidly than other activities which affect the trade and service industries.

Forecasts of the extent of the tourist business often seem unrealistic. In the foreseeable future, most Americans will continue to work five days a week and most annual vacations will last only two or three weeks. Moreover, Montana faces a lot of competition; hopeful dialogue about the rich possibilities of tourist travel can be heard in all of the western states. Our projections of trade and service employment allow for a continued growth in jobs generated by tourism, but the growth we project is more gradual than at least some Montanans expect.

The Social Cost of Space

The social disadvantages of population congestion receive lavish attention as life in the nation's large cities deteriorates. Crime, transportation tie-ups, and the alienation of the poor all detract mightily from the quality of city living. But sparsity of population also raises serious problems. The term "the social cost of space" was coined to characterize one of the important socio-economic features of the Great Plains. Montana faces its share of these costs.

Low population density makes the provision of adequate services very expensive. As a result, many areas suffer from inferior levels of these services. Some school districts fail to provide a quality of education comparable to that obtainable in more heavily settled areas. The problems of providing adequate specialized instruction are formidable, since specialists can be used economically only if they serve large numbers of students. Similarly, specialized equipment is often too costly to be made available to just a few students.

Distance and low population density also make adequate provision of statewide services, perhaps most notably those of state hospitals, difficult. This problem is discussed in Chapter 7 of "The Industries of Montana" (Part 2 of the Research Report of the Montana Economic Study).

Medical and dental facilities and personnel are in short supply in many of the less-populated regions. Often people must travel inordinate distances to reach them.

Community social life, too, is different in these areas, and it is often hard to get together enough people to build effective social organizations. Continued out-migration from many of the state's smaller

agricultural counties may be expected to make matters worse, not better, in the future.

Fine Arts

The fine arts merit special emphasis. They are, of course, an important part of any advanced society. In connection with industrial growth, it is widely hoped that Montana will, at least eventually, prove to be an attractive place for high-paying, clean, light industry, and it is often contended that such firms consider cultural facilities to be an important consideration in the selection of plant sites. The evidence on this proposition is rather unsubstantial, and our report does not suggest that the state suddenly turn to massive subsidization of the fine arts on the theory that the investment will pay off in, say, increased taxes on business firms which would immediately move here. But it does seem likely that Montana's attractiveness to "desirable" enterprises will be at least moderately influenced by the degree to which the state can provide a cultural climate to match its recreational attractions. The highly-educated people who work for "desirable" industries want these amenities for themselves and, more importantly, for their families. Their employers are sensitive to this desire.

Montanans themselves have the same needs. A gallant struggle goes on to meet them, and it is more successful than might reasonably be expected. The state has more symphony orchestras per 100,000 population than does New York City. Although these groups may not match the Philharmonic for quality, their ability to thrive testifies to their importance and their competence.

Billings and Great Falls boast outstanding art galleries, and the museum of the Montana Historical Society in Helena is a major attraction, both for residents of the state and tourists.

The Archie Bray Foundation in Helena ranks with the very best ceramics schools in the nation. The School of Fine Arts at the University of Montana numbers many distinguished artists on its faculty. Touring music and theater groups, mostly affiliated with the university system, bring cultural attractions to numerous cities and towns. The larger cities in many cases have local arts councils, and the Montana Arts Council works tirelessly at enriching the lives of the residents of smaller cities and towns.

Despite such considerable efforts and successes, cultural opportunities in the smaller communities are severely limited; and the fine arts lack adequate funding in Montana. In many states, opportunities for resident artists and companies are enhanced by substantial financial support, both from individuals and corporations. There is need for more support in this state.

. . . .

This completes our summary of the findings that are set forth in detail in Chapters 2 through 8 of Part 1 of the Research Report of the Montana Economic Study. The remainder of this chapter considers some of the implications of our findings for state policies aimed at influencing economic development. We begin by considering the advantages and disadvantages of promoting a faster rate of economic growth.

PROS AND CONS OF FASTER GROWTH

There can be no doubt that, judged by standard measures of growth, Montana's economy performed poorly during the 1950s and 1960s. Our projections imply that the economic decline of the state relative to the nation is not about to be reversed. Rather, they indicate that the "job gap" will grow, net out-migration will intensify, and per capita personal income will continue to slip relative to the national average in the decade ahead.

It is conventional to regard slow growth of population, employment, and income as signs of trouble in a region, and to infer that policies should be invoked to arrest or reverse such trends. In recent years, however, there has been increasing dissatisfaction with this conventional wisdom, and it has become common to point up some of the undesirable results of regional growth.

It seems useful to try to present a dispassionate review of the major arguments involved in weighing the desirability of state efforts aimed at promoting economic expansion. (A later section points up the limited scope for such efforts.) We begin by listing some of the more easily identified pros and cons, and then consider more subtle ones. Our discussion is not intended to be definitive. Indeed, definitive prescriptions for human well-being do not lie within the capability of economic analysis. Nonetheless, an economic approach can do much to clarify the sort of questions that need to be considered if rational decisions are to be made.

Benefits of Faster Growth

Suppose that state policies are, in fact, capable of moderating or reversing the relative decline of Montana's economy. What would be the benefits, and who would reap them?

Improved Job Market. Most obvious, perhaps, are the benefits to workers of a more dynamic job market. Nearly 60 percent of Montana's total personal income is accounted for by wages and salaries of hired workers.

According to our projections, the demand for labor in Montana will continue to grow much less rapidly than the "natural" increase in the work force in the decade ahead. This slow growth of job opportunities can be expected to produce a continuation of the recent weakness in the job market.

A slack labor market exacts its toll in three ways: (1) persons who would otherwise prefer to live in the state may leave because they cannot find satisfactory jobs, (2) they may work in the state even though they could find higher wages and better jobs in an area where labor is in short supply, or (3) they may remain in the state and become unemployed.

The precise distribution of these effects depends on the characteristics of the labor market and of its participants. In general, the more mobile is labor--that is, the more willing and able are workers to move--the greater is the extent to which slow growth in the demand for labor will show up in net out-migration, and the less it will show up in either depressed wages or unemployment. Conversely, the more reluctant or unable are workers to leave, the more severe is the glutting of local labor markets, and hence the greater are downward pressures on wages and increases in unemployment.

Government policies can provide relief by either (a) making workers more mobile or (b) inducing a greater demand for labor. The latter result, of course, is one of the goals of industrial promotion activities.

Economists often argue that attempts by government to interfere with the location decisions of industry are ill-advised, because they entail "distortions" of market forces--distortions that lead to inefficient location decisions. It is better, they argue, for people to follow jobs. They therefore generally tend to view with favor programs that are aimed at increasing the mobility of workers, and to frown on programs that aim to "distort" industrial location decisions.

But to the extent that moving is costly--both in terms of the physical costs of moving oneself, one's family, and one's possessions, and in terms of the emotional costs of being uprooted and having to change one's life style--there may be benefits from policies that succeed in moving jobs to people by attracting new industry.

In a free market economy jobs will, in fact, tend to move to labor surplus areas naturally. The reason is that in a free labor market wage rates tend to fall in areas with surplus labor, and to rise in areas of labor shortages, encouraging firms to move to the surplus areas in order to save on their wage bills.

There are, however, numerous impediments to this process. Minimum wage laws, the methods by which wages are set in unionized industries, and desires by employers to offer "fair" wages and to avoid meting out demoralizing wage reductions, all make wage rates imperfect as a device for ironing out imbalances in labor markets. Even though a strong theoretical case can be made for promoting greater flexibility of wages

as a means of dealing with such imbalances, it seems doubtful that this method could be pursued as an aim of government policy in Montana. Nonetheless, because of the slow increase in demand for workers, market forces do work to some extent to hold wages and salaries down here, relative to the country at large.

Assuming that state policy is not to be used to promote lower wages, there are two remaining avenues for dealing with the "job gap." The first is to facilitate out-migration, so as to reduce the redundant supply of labor. The second is to promote new jobs by working to attract new industry without resorting to policies that depress wages.

The benefits of faster growth in the demand for labor are not equally distributed among all members of the labor force. They are generally greatest for workers in the geographic area in which the new jobs open up, and for those whose skills are best suited to meeting the new demands. Moreover, some types of workers are more mobile than others. It is the least mobile workers who are most vulnerable to a weak job market.

Everyone knows that factors other than conditions in the job market enter into peoples' decisions about where to live. Nonetheless, among persons in the labor force, moving appears to be triggered mainly by economic forces. For example, The Geographic Mobility of Labor, a study published in 1964 by the Area Redevelopment Administration of the U.S. Department of Commerce based on a nationwide sample of about 3,000 workers, indicated that among those interviewees who had moved once or more in the past 5 years, 73 percent mentioned "economic and occupational" reasons for moving. Only 20 percent mentioned "community reasons" (a personal liking for the area to which they moved or a dislike of the area

they left). And only 22 percent mentioned "family reasons" (a desire to be near relatives).

Willingness and ability to move in search of better employment opportunities differs widely among various groups of workers within a given area. Studies of labor mobility indicate that young people are more mobile (that is, willing and able to move) than are older people; that mobility is considerably greater for highly-educated workers than it is for those with poor education; and that professional, technical, and managerial workers are considerably more mobile than blue-collar workers, farmers, or the self-employed. It should be recalled that the rate of net out-migration from Montana between 1950 and 1960 was found to be far higher for college-educated males than it was for the rest of the population.

Logic suggests that among a given group of workers whose opportunities are limited or deteriorating, those who do move are harmed less than those who do not. If the movers succeed in getting into a better job market, they have, at some cost (the cost of moving--including not only the financial sacrifice, but the emotional sacrifice to them and to friends and relatives they leave behind as well) been able to escape at least partially the consequences of the poor job market. But among those who remain are many who stay because they are ignorant of opportunities elsewhere or fearful of the uncertainties involved in making a break, and others who have their own strong reasons to resist moving, even if they end up unemployed or making less money than they could elsewhere. Thus the benefits of a more rapid growth of local job opportunities would accrue mainly to persons whose mobility is most limited, rather than to those who would otherwise move.

Increased Local Business Profits. Every sizable community has its economic boosters--people who work actively and tirelessly to attract new industry. There are many motives for such endeavors, but it is not surprising that promotional groups are heavily laden with local entrepreneurs whose businesses cater to local markets. Aside from whatever other gains these individuals may experience from more rapid growth, an increase in their own businesses is an important one.

Since a new export-oriented industry may provide as many as nine new residents for every job it brings, attracting primary industry is a matter of acute interest to local businesses. Conversely, the departure of a major primary employer is a cruel blow to these firms.

According to the 1960 Census, there were nearly 10,000 self-employed "managers, officials and proprietors" outside agriculture in Montana. Nearly half were owners of retail firms, and most of the others probably engaged in activities designed to serve local markets.

Some types of businesses, of course, are more affected by growth than others. In a community with one television station, population growth may be expected to exert a roughly proportionate increase in the value of advertising time on that channel. For a drugstore, on the other hand, the increase in business would probably be much less than proportional to the increase in population, since new drugstores would open up as the town grew. The same can be said for most retail trade firms, and for other derivative businesses, including construction, insurance agencies, accounting firms, laundries, plumbers, and a host of other local establishments. But as a general matter, nearly all owners of businesses that depend on local markets have something to gain from growth.

Increased Site Values. A closely related benefit accrues to owners of land. Site values can be expected to rise as an area's employment and population grow. Fortunes have been made turning former farmland into housing developments, shopping centers, and industrial parks. In fact, much if not most of the income earned by persons in the development business comes from increased site values, and economic growth is a major source of such increases.

Individual homeowners as well share in the gains from increasing land values although, since their gains are not realized until the property is sold, it may turn out that the principal beneficiaries are their heirs. (And if rising land values result in higher property taxes, the homeowner who does not contemplate selling may actually resent the increase in his net worth.)

Costs of Faster Growth

It seems abundantly clear that faster economic development would result in substantial economic benefits to certain groups. But it is also clear that growth entails costs. We turn now to a consideration of two obvious ones.

Pollution and Environment. As we have already pointed out, pollution has been a problem in Montana at least since the early copper mining days. But concern with pollution and environmental deterioration generally has become particularly widespread in recent years. One reason is that the enormous technological changes since World War II, together with rapid population growth, have led to vast increases in the amount of pollution generated. Another is that as peoples' real incomes have risen, they have been able to afford the "luxury" of worrying about their environment, and have gained more leisure time to enjoy it.

Accelerated economic development brings with it a threat of accelerated environmental deterioration. It is sometimes argued that pollution is not an economic problem. This is not so. Rather, pollution is not a problem that the U.S. economic system, in its present state, is up to handling efficiently.

Pollution reduces the quality of life (or the standard of living, correctly defined). Most people would be willing to give up something of value--such as part of their income--in return for less pollution. In fact, recent studies of the relation between pollution and residential property values indicate that the amounts people are willing to pay to avoid pollution are substantial.

But in the absence of controls, the industrial polluter does not have to reckon with the costs of his emissions in the way that he must reckon with the costs of raw materials, capital, and labor that he uses in production. Nor do individual consumers have to bear all of the costs of their polluting activities, which include littering the roadsides with empty beverage containers, polluting the air with automobile exhaust, burning logs in fireplaces, and even filling the air with smoke from campfires and barbecues.

The result is that industry and consumers pollute too much. The market economy is not up to dealing with pollution problems because it does not create sufficient incentives not to pollute. Rational programs of public intervention are needed, and if industrial growth increases pollution, it inflicts costs that must be weighed, somehow, against whatever benefits it might confer.

Just as benefits from economic expansion are not evenly distributed, so the costs of any added pollution it might bring are not borne evenly. Those nearest a polluting facility are usually hurt most. The intensity of an area's air pollution problem depends, among other things, on climatic factors. In Western Montana, for example, temperature inversions that trap airborne wastes compound the pollution problem enormously. And some persons are more susceptible to the undesirable effects of environmental degradation than are others, whether because of specific allergies or because their state of mind is more dependent upon physical surroundings.

These burdens are extremely hard to measure. Most studies of the damage inflicted by pollution have tended to concentrate on its more tangible, physical, and easily measurable effects, and thus to seize upon over-simplified notions of costs. For example, attempts have been made to measure costs by adding up wages lost, medical bills, and funeral expenses that result from higher incidence of diseases attributable to pollution. The results are often silly. Impairment of human well-being is not accurately measured by laundry lists of such expenses. More recent studies provide sounder bases for measuring costs of pollution, but application of the new approaches is still in its infancy.

Congestion. A closely related cost of economic expansion arises from the congestion that results as more and more people are crowded into a limited space. On average, of course, Montana could hardly be called congested. But in some Montana cities there is noticeable crowding, and the rural valleys in the western part of the state have attracted large numbers of people who are willing to go to substantial lengths to avoid

crowded conditions. Moreover, congestion tends to exacerbate the problems of pollution as more and more waste is discharged in a limited area.

Industrial expansion that brings more people into the state may pose the threat of added congestion. A lot of Montanans are particularly sensitive about this problem. For one thing, many residents consider Montana's outdoor life the chief reason for living here. Fishermen, hunters, hikers, campers, horseback riders, snowmobilers, yachtsmen, and skiers all have reason to be uneasy about the effects of population growth. By their words and actions, many of them have made it clear that they are willing to give up some of the benefits of growth in return for the amenities of an uncongested environment.

Other Effects of Accelerated Growth

In addition to the rather easily specified benefits and costs just discussed, an increase in the rate of economic growth might be expected to have other important effects which cannot be labeled "good" or "bad" a priori.

Levels of Taxation. It is sometimes argued that faster growth will ease tax burdens in the state. As far as we know, this hypothesis has not been subjected to rigorous testing. The fiscal influence of economic growth cannot be determined a priori, since it adds not only to the tax base but to the required level of government services as well. The question has not received much systematic study, but it is clear, both on logical grounds and on the basis of case studies, that the fiscal impact of economic growth differs from case to case, depending upon the kind of activity involved, the extent to which it results in increasing

the population (as opposed to absorbing resident, unemployed workers), and numerous other detailed considerations.

We have tried to find out if data on 1967-68 per capita taxes by state shed any light on this question. Numerous studies have shown that the two factors that influence spending by state and local governments most heavily are population and income. Since most government services must be expanded more or less proportionately with population, it is to be expected that increased total expenditure and taxes will accompany population growth. And since expenditure per capita tends to be closely tied to per capita income, any policy that raises per capita income is likely to raise, not lower, per capita taxes, by some fraction of the increase in per capita income. This does not mean that taxpayers are made worse off, since the added expenditures result at least partly from the higher level of services that people demand, and are willing to pay for, as their incomes rise.

We find that data on per capita tax levels in the 48 conterminous states in 1967-68 do not support to the notion that growth per se brings lower taxes. They do, however, reveal a loose (and inconclusive) association between per capita tax levels and population density for the least densely populated states. Nevada and Wyoming, the two states that have lower population densities than Montana, had higher per capita state and local taxes. Among the more heavily-settled states, there appears to be no systematic relationship between per capita taxes and population density.

Slightly stronger evidence comes from an examination of the relationship between per capita taxes and total population. In 1967-68, the states

with the smallest populations (not necessarily those with the lowest population densities) had, on average, higher per capita taxes than all but the very largest states. In 1967-68, Montana's per capita state and local taxes were $340. The 8 states in Montana's size group (500 thousand to 1 million inhabitants) had average per capita taxes of $315, about 20 percent lower than the average for the 3 states with populations under 500,000, but about 10 percent higher than the average for the 7 states with populations between 1 million and 2 million. (Average taxes began to rise again as population increased beyond 2 million.)

This evidence is consistent with the oft-heard statement that Montana's population is too small to permit certain government programs to be carried out on a scale that permits maximum efficiency. If this is so, growth would make possible realization of some "scale economies" that are not now available.

It should be stressed that numerous other factors are involved in determining tax levels, so that per capita taxes vary widely even among states with roughly equal populations. For example, among the 8 states with populations between 500 thousand and 1 million, one--New Hampshire--had per capita taxes of about $270 in 1967-68, while both Delaware and Montana had per capita taxes in excess of $340. With many factors at work, it is difficult to pinpoint the influence of a single one. Using more sophisticated statistical procedures that permit more than one factor influencing per capita taxes to be taken into account, we are unable to detect any significant relationship between the level of population and per capita taxes. More research might dispel the uncertainty that surrounds this question, but our own work leads us to be skeptical about the proposition.

The Way of Life. Economic growth or decline can change the character of an area drastically. Opinions differ widely as to whether the effects are good or bad, and we cannot settle that question. There are, however, notable problems associated with both large and small size. One is the congestion that goes with a large population, already discussed. Another is the "social cost of space," treated in Chapter 8 and touched on briefly earlier in this chapter.

Even though some of the larger cities of Montana are able to offer a modicum of cultural attractions, and the larger school districts can provide well-rounded programs, specialized staffs, and attention to the needs of particular small groups of students, for many smaller communities such amenities are rare or absent entirely. Many of these communities do not offer a reasonably full range of services and shopping facilities to the local population. Inadequate medical service poses a particularly difficult problem in some of the least settled areas.

On the other hand, the problems of big cities across the nation are multiplying rapidly, and it seems doubtful that many Montanans are very interested in metropolitan life. And even on a small scale, expansion can produce substantial problems, as a consideration of some of the growing pains of Missoula and its surrounding area (the state's fastest growing urban area) will testify.

The changes that might be expected to accompany accelerated development depend partly, of course, on whether the growth is anticipated and planned for. But in the final analysis, even with ideal planning, growth would mean different things to different people.

It seems unlikely that the state will develop any major metropolitan areas in the near future. But even now, Montana's larger cities are experiencing, in small doses, some of the problems that have reached critical proportions in the nation's major urban centers.

Where We Come Out

Clearly we can offer no "scientific" final answer to the question whether Montana should pursue faster growth, and if so how, and to what degree. The issue is a live one, involving numerous conflicting interests, and ultimately it has to be worked out in the political arena.

Attitudes toward industrial promotion differ widely among, as well as within, states. Compare, for example, the intensive campaigns of the large industrial states of the northeast to attract still more industry with a recent account by Editorial Research Reports of the "anti-growth, anti-tourism posture" in Oregon, which "stems from concern about the effects of over-population on the state's scenic and recreational resources."

As we see it, Montana is very different from Oregon. According to preliminary census data, Oregon's population increased by 287 thousand persons, or 16 percent, between 1960 and 1970, reflecting substantial net in-migration. In Montana, the final census tabulations show that population increased only about 20 thousand, or roughly 3 percent over the entire decade. Moreover, Oregon's population density is presently more than four times Montana's.

More rapid growth, as we have stressed, means different things to different people. But its benefits are likely to be much greater in a state that is growing slowly than in one that is already growing

rapidly. Similarly, the costs of still faster growth are likely to be greater in a state that is already growing rapidly than in one that is growing slowly. There is no rate that is just right for everybody, and there is surely some rate of growth that would be too fast for most Montanans. Our own opinion is that this rate is not likely to be reached in the near future. There is, we think, solid reason for the state to endeavor to moderate the downward trend of its economy relative to the nation as a whole. (We doubt very much that the state could actually reverse the decline in the years immediately ahead.)

This is not to say that increased growth is worth any price, or that a policy is necessarily good if it promotes growth. Some such policies could entail substantial costs in terms of other goals. Suppose, to take an extreme example, that as other states tightened up on pollution standards, Montana were to enact a constitutional amendment stating that neither the state nor any of its subdivisions could interfere with the "rights" of any person or business to dump waste on the ground, or into the streams, or into the atmosphere. The state might then attract new firms that found compliance with anti-pollution laws elsewhere costly. These firms would provide new primary jobs, and total employment would rise. So might per capita personal income. Nonetheless, people who had to live with the resulting pollution might well be made worse off. The moral is obvious. The success of economic development policy cannot be measured simply by determining whether it increases employment and income. All of its ramifications count, and the various interests at stake may conflict with one another.

STATE DEVELOPMENT POLICIES

The power of the state to influence the rate at which it grows without resorting to actions clearly deleterious to the general welfare is severely limited. The realities of economic development often get lost in the rhetoric of public debate. For example, one might think from public discussion of the subject that the failure of Montana's per capita income to grow as fast as the national average is primarily the fault of the incumbent in the statehouse, whoever that might be at the time. The fact is that the state has relatively little power to affect this figure.

In the past, short-term fluctuations in Montana's per capita income have been due primarily to changes in agricultural markets. Even though income from agriculture accounts for only about 10 percent of Montana's total personal income, it is by far the most volatile component.

Over the longer term, the growth of per capita income is heavily influenced not only by the fortunes of agriculture, but also by the trend of income per worker in nonagricultural pursuits, by the level of unemployment, and by the changing age-structure of the population. In all of these areas, there is some room for state economic policies to exert an influence. But it would be a mistake to suppose that state policies are the most important determinants of the region's economic fortunes.

Critical Role of Primary Jobs

The key to providing expanded job opportunities in Montana is accelerated growth of primary employment--employment in businesses that produce mainly for export. According to our projections, there

will be 2.4 jobs in derivative industries for every primary job in 1980. Even after allowance is made for inaccuracies in our projection, it is clear that the main effects of attracting new primary industries will be registered in derivative employment, and that the over-all effect of even a small increase in primary employment will be substantial.

To some extent, growth can also be sparked by what we have classified as derivative industries. This reflects the fact that the classifications are imperfect. For example, in the financial business, local growth can reflect development of export markets for financial services, or it can reflect a displacement of imported services that would otherwise be obtained in, say, Minneapolis, Denver, or Spokane. In Montana's case, employment attributable to interstate tourism ought properly to be segregated from other trade and service industry employment, and placed in the primary category. The problem is that we have no statistical basis for making such a separation.

Interstate competition naturally centers on primary industries, especially manufacturing and federal government installations. The preoccupation with attracting manufacturing industry derives partly from an exaggerated notion that manufacturing activity itself confers "prestige" on an area. But it also reflects the fact that many kinds of manufacturing provide high-paying, reasonably stable jobs. The same is true of federal government employment.

Most importantly, however, these two kinds of employment are the most dynamic. Agriculture, mining, and railroads, the other major primary industries, have all been declining, both in Montana and across the nation. (It should be remembered, however, that we project an increase in Montana's mining employment in the coming decade.)

Manufacturing in Montana is concentrated in lumber, food, and primary metals, industries which have declined or grown only slowly across the nation. Although the state has experienced a rapid percentage growth of jobs in "other" manufacturing activities--nearly 50 percent between 1950 and 1968--this sector is so small in the state that the absolute increase (two thousand jobs) was of limited importance. Our projections visualize a further growth of 1.6 thousand jobs in "other" manufacturing between 1968 and 1980, more than for any other category of primary employment except federal government, where the projected increase is 4.2 thousand jobs.

Limited State Powers to Promote Growth

It is worth reemphasizing that our projection of slow growth for Montana in the years ahead is not based on a view that, industry-by-industry, the state will fail to share national growth. Rather, it reflects the fact that Montana still specializes in industries that are, nationally, going downhill or growing only slowly. These projections are founded on a consideration of the basic forces we expect to be at work, both in the national economy and in Montana. The state has no power to control trends of the national economy. And it has only limited ability to influence most of the basic factors that enter into business location decisions. These include the cost and availability of raw materials, qualified labor, and other production "inputs" including energy, transportation, and a whole range of anciliary services. The powers of the state to affect these factors are constrained by the United States Constitution, by Montana's constitution, and by a need to consider other, possibly conflicting goals, including environmental protection.

It is difficult, for example, to imagine that the state could have done much to reverse the decline in mining and railroad employment during the past two decades, or to have accelerated the growth of jobs in forest products industries, at least without resorting to policies that were unacceptable for other reasons.

In attracting new industry, Montana's most important disadvantages, probably, are the state's distance from major markets and its relative lack of large pools of skilled labor. The state is relatively powerless to control these factors. But it does influence, and in some cases control, what are sometimes called "secondary" factors that affect business location decisions. These are factors that may make the difference if the basic factors are generally favorable.

Secondary Factors Influencing Location Decisions

In 1963, Fortune magazine published a survey of management designed to determine the importance attached to various "community factors" involved in the selection of plant sites. These included most of the factors over which the state has some control. Table 1.8 shows the findings.

None of the four items mentioned most often by the respondents was a direct policy tool of government used specifically to attract industry. Rather, all had to do with general characteristics of the region, its government, and its inhabitants. In general, government policies seem more likely to reflect these factors than to influence them.

Tax policy receives enormous attention in discussions of economic growth, but in the Fortune survey educational opportunities were mentioned 50 percent more often than tax concessions. A superior education system

Table 1.8

Fortune Survey of Community Factors Affecting Location Decisions

Factor	Number of Times Mentioned	Percent
Community attitude toward industry	376	95.4
Good employer-employee relations in state	357	90.6
Productivity of workers	346	87.8
Political calm and stability	215	54.6
Educational opportunities	204	51.8
Local or state tax concessions	133	33.8
Availability of training facilities	77	19.5
Recreational opportunities	55	14.0
Local or state sponsored financing	53	13.5
Population	51	12.9
Good weather	40	10.2
Cultural opportunities	39	9.9

Source: Fortune, A Fortune Survey on Locating Plants, Warehouses, Laboratories.

not only increases the local supply of well-trained workers; it also has an important bearing on a firm's ability to attract and retain such workers, who are typically sensitive about the quality of education their children receive.

The findings of the Fortune survey were not, of course, definitive. For example, another study, published in 1964, asked 32 business firms that had recently located in South Carolina about the importance of various factors entering into their location decisions. It found that taxation policies and the quality of local government were about equally important. And some of Fortune's findings for 1963 are by now dated. But the survey does provide a point of departure.

The two most commonly employed devices for attracting industry--tax concessions and financing aids--do figure in business location decisions, but their importance is more limited than is sometimes thought, judging from Fortune's findings. And as one expert, Benjamin Bridges, concluded on the basis of a study done for the state of Wisconsin:

> Financial inducements of the types now in common use are certainly a secondary location factor in the choice of region and are probably also a secondary factor in the choice of location within a region. On the basis of available evidence it is impossible to establish precisely how important secondary location inducements are. In some cases offers of inducements might significantly affect the decision of a number of firms as to whether to locate in a particular state or in the adjoining state. In addition to reducing costs, offers of inducements by groups in a particular state might noticeably improve that state's image in the eyes of business officials.

Business Tax Policy. Since business taxation is treated in the recently-completed Montana Fiscal Affairs Study, we do not consider it in detail here. However, it is useful to take a look at the broad outlines of the problem, since in Montana and elsewhere it figures so importantly in public discussions.

In 1967, the Advisory Commission on Intergovernmental Relations, a highly regarded group of federal, state, and local officials, published a comprehensive study of State-Local Taxation and Industrial Location. Among the findings were these:

1. Mainly as a result of competition for new industry, state and local governments have tended to reduce their reliance on business taxes. Taxes with an "initial impact on business," which include levies on real and personal property held by business firms, corporation income taxes, gross receipts taxes, licenses, severance taxes, and other miscellaneous business levies, accounted for 34.2 percent of total state and local tax collections in 1957. By 1967 the proportion had dropped to 29.3 percent. The mirror-image of this shift away from business levies was increasing reliance on taxes imposed "primarily on individuals."

2. State and local governments have adopted a wide variety of special policies designed to attract and retain industry. Table 1.9, adapted from the Commission Report, summarizes these policies.

3. The impact of tax policies on business location decisions is limited primarily to influencing the specific location chosen within a broad geographic region.

4. Individual states tend to "stay in line" with their neighbors, so that business tax policies do not differ widely among neighboring states. This lack of sharp differences makes it difficult to determine how powerful tax incentives are in determining the location of businesses within a given multi-state region.

5. "In order to maximize the favorable aspects of the state tax image while minimizing loss of revenue, state legislative bodies also pursue highly selective business tax reduction policies--property and sales tax exemption for new industry, freeport provisions to minimize business personal property tax loads, special rapid write-off provisions for corporate income taxpayers, and in some cases outright repeal of the tax on business inventories--the tax that is the target of especially heavy criticism from the business community."

Montana's business taxes provide a larger-than-average proportion of state and local tax revenues. But the trend in Montana has been for the proportion of revenue accounted for by these taxes to decline. As table 1.10 shows, in 1957 taxes with an "initial impact on business" accounted for 38.8 percent of total levies collected by Montana's state and local governments. By 1967, this share had dropped to 35.9 percent, 6.6 percentage points above the average for all states. The table also indicates that Montana relied more heavily on business taxes than did most of its neighbors.

Between 1957 and 1967, the proportion of taxes raised from business firms dropped more rapidly in Colorado, Washington, and Idaho, all of which grew faster than Montana. But it fell somewhat less in Utah,

Table 1.9

State and Local Tax Policies Designed to Attract and to Hold Industry Classified by Type and Character of Action

Type of Tax	Type of Benefit and Character of Policy or Practice		
	1 Legislative Tax Policies Benefiting Most or All Firms	2 Legislative Tax Policies Benefiting Certain Groups of Firms	3 Administrative Tax Practices Benefiting Particular Firms
A Personal property tax	1A No tax (New York, Delaware, Pennsylvania, and Hawaii) Selective tax reduction action[1] State administration	2A Selective exemptions and rate reductions: "Free port" tax exemption with primary benefits accruing to those firms with extensive inter-state shipment (26 states)[2]	3A Favorable assessment obtained through negotiation
B Real property tax	1B Low effective tax rates[3] Well-defined assessment standards	2B 1. Reduced real estate tax load for "new" industry (example--Montana through classified assessments) 2. Tax exemption authorized by legislation for designated types of "new industry" (in 13 states local governments are authorized to grant exemptions for "new industry;" in Louisiana, a state board can grant exemptions from local property taxes)	3B Favorable assessment obtained through negotiation
C Corporation income tax	1C 1. No tax (11 states)[4] 2. Low effective rate (examples--Indiana, Missouri, New Mexico, and North Dakota)	2C 1. Preferential "write-off" for selected types of investment (example--New York's accelerated write-off provision for R & D facilities) 2. Sales destination factor benefits home-state firms with extensive out-of-state sales (example--24 states with three-factor sales destination formula)	3C Favorable income apportionment obtained by multistate firms through negotiation
D Sales vs. personal income tax issue	1D 1. State use of sales taxes--no broad based personal income tax (13 states)[5] 2. Direct business use exemption from sales tax (Ohio has most liberal exemption provision)	2D Machinery purchases exempted from sales tax for "new and expanded" industry (example--Kentucky and Georgia)	3D
E Unemployment compensation tax	1E Below average tax rates[6]	2E Merit rating provides greatest benefit to those firms with the most stable employment record	3E

Source: Advisory Commission on Intergovernmental Relations, State-Local Taxation and Industrial Location.

1. Examples are: the exemption of wholesalers' and retailers' inventories in Arizona; the gradual phase-out of the tax on manufacturers' inventories in Connecticut; the exemption of special tools in Michigan; and the 60 percent credit against the tax on merchants' inventories and manufacturers' materials and finished products in Wisconsin.

2. The 17 states that tax business inventories and do not have free port laws are: Alabama, Alaska, Arkansas, California, Colorado (except that property in transit will be assessed at 5 percent beginning in 1967), Florida, Georgia, Hawaii, Maryland, Montana, New Hampshire (but goods held for out-of-state delivery by a manufacturer when title has passed to the purchaser are exempt), New Mexico, North Carolina (but tangible personalty held at a seaport awaiting shipment to a foreign port is exempt), Rhode Island, Vermont, Virginia, and West Virginia. As noted in box 1A, four states (Delaware, Hawaii, New York, and Pennsylvania) exempt all personal property. In addition, Arizona and New Jersey exempt business inventories from property taxation, and Kentucky exempts personal property held in public warehouses for trans-shipment from local general property taxation but imposes a nominal state rate on such merchandise. The remaining 26 states, all of which tax business inventories, have free port tax exemptions.

3. Effective property tax rates (the amount of tax paid as a percent of the market value of the property) are particularly low (between 0.5 percent and 0.9 percent) in most of the Southern states, although some of the Western states (for example, Hawaii, Montana, Nevada, Washington, and Wyoming) also have effective rates that are well below the U.S. average of 1.4 percent (in 1962).

4. Florida, Illinois, Maine, Michigan, Nevada, New Hampshire, Ohio, South Dakota, Texas, Washington, and Wyoming.

5. Florida, Illinois, Maine, Michigan, Nevada, New Jersey, Ohio, Pennsylvania, South Dakota, Tennessee, Texas, Washington, and Wyoming.

6. The states with the lowest effective rates (total unemployment compensation tax payments as a percent of total wages), ranging from .4 percent to .7 percent in 1964 were: Indiana, Iowa, Minnesota, Nebraska, South Dakota, Texas, Virginia, and West Virginia. The U.S. average effective rate was 1.3 percent (in 1964).

Table 1.10

Percent of Total Taxes Accounted for
by Levies with an Initial Impact on Business
Montana, Neighboring States and U.S. Average
1957 and 1967

	1957	1967
Wyoming	40.3	40.1
MONTANA	38.8	35.9
Idaho	34.5	30.3
Utah	38.2	29.0
Washington	30.6	28.3
Colorado	31.4	28.2
North Dakota	23.2	22.8
South Dakota	18.5	18.9
United States Average	34.2	29.3

Source: Advisory Commission on Intergovernmental Relations, Supplement to State-Local Taxation and Industrial Location.

whose growth also exceeded Montana's, and we would hesitate to infer that the differing rates of change in business taxes revealed in the table were important causes of the differences in economic growth rates.

The differences shown in the table trace to many factors other than unequal tax rates. For example, the low percentages for the Dakotas are due partly to the relative unimportance of business activity in these predominantly agricultural states. On the other hand, Montana relies more heavily on business taxes than do either Colorado or Utah, both of which are less agricultural, and more industrial, than this state.

Among the eight states shown in the table, only Wyoming collected a larger portion of its total taxes from business levies than did Montana in 1967. In fact, of the fifty states, only four--Louisiana, Texas, and West Virginia, in addition to Wyoming--showed higher percentages of business to total taxes than Montana.

These figures suggest that this state's tax policies are not likely to provide unusual incentives for firms to locate here rather than elsewhere in the region. It must be added, however, that we have no evidence to prove that taxes have had an appreciable effect on Montana's growth.

The state does offer special tax incentives to business, through property tax concessions. One puts "new industrial property" in "Class Seven" for property tax purposes during the first three years of operation. This means that the taxable value of the property is only 7 percent of assessed value. Normally, land, improvements, and equipment are given a taxable value of 30 percent, and inventories of merchandise 33 1/3 percent, of assessed value.

This concession is strictly limited to new business plants. It is not granted for expansion and modernization of established facilities, and it applies only to firms engaged in manufacturing, mining, and milling, as opposed to trade and service-type firms. The purpose of these restrictions is to confine the favor to new businesses in primary industries, without giving up revenue from established businesses or derivative industry.

Another Montana concession confers Class Seven status on "freeport merchandise"--goods produced elsewhere that are either in transit through the state (including those in storage and awaiting transit) or that are incorporated into products destined to be sold outside the state. Machinery and equipment used to control air pollution is also given Class Seven status.

Many other states grant special tax concessions to new industry, often more generous than Montana's. However, according to a study published by the New York State Department of Commerce, as of late 1969 no other Rocky Mountain states offered tax concessions for new industrial property. Neither did Washington or either of the Dakotas. (North Dakota does allow new corporations a limited credit against income tax for wages and salaries paid in the state for the first five years of operation.)

A majority of states have freeport legislation. In many cases the provisions are more liberal than Montana's, allowing complete exemption of all merchandise, regardless of origin, that is destined for shipment outside the state.

Table 1.9 shows numerous other business tax concessions offered by various states. Among the more important are low (or no) corporate income taxes and exemption of inventories and business machinery and equipment from property taxes.

Financing Aids. Most states provide financial aids for business investment. There are three types of programs: development credit corporations, state industrial finance authorities, and borrowing by local governments or development agencies which issue bonds to finance business investment.

Financing aids rank low in the list of factors mentioned in the Fortune survey. However, since the survey was published in 1963, competition among states through such devices has blossomed, and failure to provide such assistance is more likely to hamper development efforts now than it was when they were less widely used. Furthermore, at least one careful study has turned up evidence indicating that these aids may have

a greater impact on the volume of business investment than has generally been acknowledged. And the Montana Department of Planning and Economic Development finds that among firms that are contemplating investment in the state, many show a marked interest in the availability of help in securing finance.

One form of assistance comes from state-chartered industrial credit corporations, which obtain private capital from the sale of stock to banks, insurance companies, and other business firms, and are empowered to borrow from stockholding financial institutions. They make loans to businesses that cannot obtain credit from conventional sources. It is claimed that they permit greater pooling of risks than can be accomplished by private lenders. They are more flexible than most public lending agencies, since they can make loans to private firms not only for land and buildings but for machinery, equipment, working capital, and debt retirement as well.

Montana now has a development credit corporation in the capital-raising stage. Most nearby states have authorized corporations, and in several they are operating.

Another financing device, the state industrial finance authority, takes two distinct forms. The first, common in New England, guarantees part or all of private mortgage loans made to industry, in return for an insurance fee. The second makes direct loans of state funds to local development corporations, which in turn assist in the financing of industrial development projects. By late 1969, nineteen states had established industrial finance authorities. Of these, fifteen were located in the northeastern part of the country, and according to the New York study, there were none in the mountain states of the west.

Still another approach is local government borrowing to finance industry. This form of assistance has a long history, (starting in Mississippi in 1936) but it was during the 1960s that it mushroomed. Although it has been used most intensively in the South, by the end of 1967 forty-two states had authorized local governments (or special local development agencies) to issue bonds to finance the construction of industrial facilities for lease or sale to private industry. Usually, borrowing is limited to revenue bonds that can be amortized only out of revenues from the project being financed. In a few cases, however, states permit local governments to issue general obligation bonds, which in effect commit the government to amortize out of tax revenues should the industrial project being financed fail to produce sufficient revenue.

A major advantage of industrial development bonds is that interest paid is exempt from federal and, in most cases, state, income taxes. This means that the issues can be floated at lower interest rates than could be obtained directly by an industrial borrower, whose debt would not have tax-exempt status. Because the device exploits the exemption of interest on state and local bonds from federal taxes it has been widely criticized, and Congress has recently imposed severe restrictions on its use.

In addition, the facilities being financed are sometimes exempt from state and local property taxes. This is not true in Montana, however, or in most nearby states.

Montana's revenue bond law recently passed its initial test of constitutionality. The first issues will be used to finance anti-pollution

equipment of the Hoerner-Waldorf Company. There remains some doubt about the meaning of legal restrictions on the scope of activities that can be aided in this way.

According to the New York Study, as of late 1969, Wyoming, Colorado, Utah, Washington, North Dakota, and South Dakota all had laws permitting local governments to issue revenue bonds, although the constitutionality of Colorado's legislation had yet to be tested in the courts. Washington permits use of these bonds by port districts only.

The experts seem to agree that, although financing aids are not primary causes of industrial growth, they do have an effect, particularly on decisions of firms that have limited access to normal private sources of credit. The interest subsidy, if any, is thought to be less important than the effect of making credit available to firms with limited access credit markets. It also appears that loan programs are more important in increasing the amount invested by the firm in a local area than in inducing it to locate there in the first place.

One student of these programs, Edwin C. Gooding of the Federal Reserve Bank of Boston, argues that among the various types of financing aids now in use, the loan guarantee approach (used by state governments in Maine, Connecticut, and Rhode Island) offers the most advantages to a state. The critical question, of course, is whether there is, indeed, a "credit gap" that gives rise to a legitimate need for a state-sponsored loan insurance program, and whether the program adopted is structured and run so as to meet this need. Gooding points out that the loan-guarantee programs in operation have experienced very few losses. Any insurance-fund approach to loan guarantees requires, for sound operation, a fairly

large-scale program with many borrowers, since effective risk-pooling works on the basis of the "law of large numbers." In this respect, Montana is in a less advantageous position than larger states.

Those Important Other Considerations. Although tax concessions and financing aids are the chief devices used by states and local governments for the specific purpose of attracting industry, other policies that are designed partly or wholly to suit different ends probably have a more important impact, according to most experts.

As we have noted, educational opportunities are thought to be an important secondary factor entering into business location decisions. Montana's educational program is basically strong, although some smaller communities have difficulty providing specialized programs and adequate buildings and equipment. All educational institutions in the state, from public schools through universities, face difficult financing problems. As with other public services, the future quality of educational programs will depend on the state's ability to solve its tax problems and to maintain constant, effective review of program operation. Vocational education, which has grown rapidly in Montana in recent years, has an important potential role in supplying specialized manpower needs, especially if these needs can be identified long enough in advance for programs to be geared to meeting them.

Recreational opportunities, which are one of Montana's most distinct assets, ranked only eighth in the 1963 Fortune survey. Good weather and cultural opportunities ranked at the bottom. Looking toward the longer-run future, as incomes continue to rise people will become increasingly concerned about the quality of their lives and the use of their leisure

time. Some items at the bottom of Fortune's list, including cultural opportunities, recreational opportunities, and lack of population congestion will become more important to firms that need to offer an attractive life to their workers. In fact, we would guess that these factors have already become more important than they were in 1963 when the Fortune survey was conducted. It would therefore seem worthwhile to maintain and cultivate these features in Montana, not only for their own sake, but for their contribution to the state's attractiveness to desirable new industry.

One important consideration that crops up often in studies of business location decisions is the quality of government generally. Rational, efficient government is an important consideration to forward-looking industries that contemplate making substantial investments in any state. Investors understandably try to avoid uncertainty, and to seek "political calm and stability" to use the term employed in the Fortune survey. Almost by definition, rational, efficient government generates far less uncertainty than does irrational, inefficient government. This consideration applies doubly to government policies that have a direct bearing on business profits.

Tax policies provide a good example. Professor Ronald Wonnacott, in a thoughtful paper written for the Upper Midwest Economic Study in 1963, argues that the real or apparent inequity of taxes, rather than their level, is what generates a good or bad "image" for an area. This view is common among students of business taxes.

Moreover, businesses worry about the future. The South Carolina study mentioned earlier found that "trends in tax legislation" ranked

above "special tax inducements" as an influencing factor in the minds of the new business firms interviewed. Potential investors go to substantial lengths to protect themselves against capricious influences on their costs. Like other taxpayers, they might wish to dictate state policies if they could. But failing that, they value a setting in which decisions affecting them are arrived at only after a rational consideration of the issues involved, because they feel more assured that in such a setting they will not be exploited.

Despite the fact that there have been two major studies of the state's fiscal system during the past six years, discourse over taxes in Montana is primitive and propagandistic, and efforts to bring leaders of the major political parties together to work on the problem in a dispassionate, forward-looking way have failed.

More generally, governmental reorganization and consolidation, and coordinated multi-county districting are all urgently needed if government is to be efficient. The need for efficiency arises independently of any effects it may have on economic development. But the accompanying improvement in the state's "image" to potential investors should not be ignored.

Some Strategic Problems

The most compelling argument for faster growth is the effect on labor markets. Attracting primary industry is the key. The State Department of Planning and Economic Development works to attract new industry, and to help solve the problems that arise in connection with getting new ventures off the ground. These activities should, of course,

be geared to providing new jobs where needs are greatest. We are not experts on industrial development. Our study does, however, contain a great deal of information that should be useful in the formulation of policy. Below we touch on some of the most important problems that need to be faced.

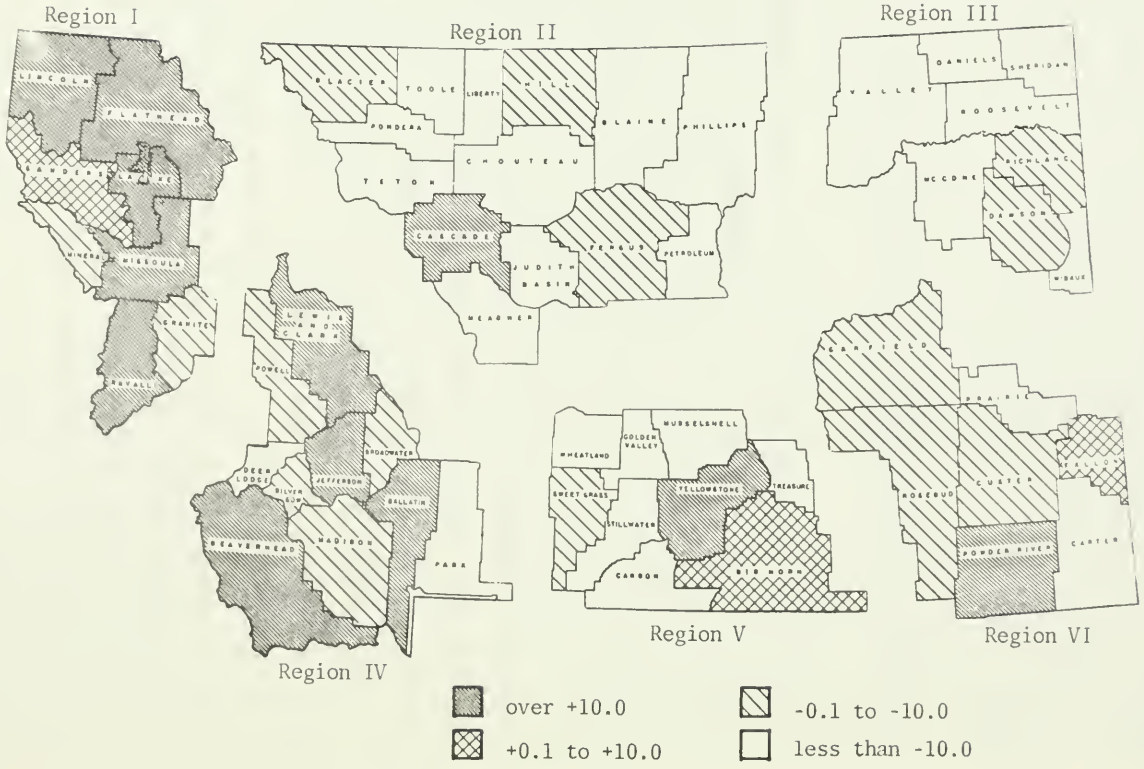
Dangers of Diffused Effort. One problem is that jobs are needed most in areas where employment has been growing least rapidly--just the areas where growth is hardest to promote.

The pinch of the job gap is greatest in the areas where the gap itself is greatest, and the rate of population change in an area provides a rough measure of the severity of this pinch. As figure 1.10 shows, between 1960 and 1970, population declined in 41 of Montana's 56 counties, and increased by less than 10 percent in another 3. As Chapter 6 points out, unemployment is greatest among the "nonfarm rural" population--persons who live outside towns with a population of 2,500 or more, but who do not earn their livelihoods from farming.

In the future, growth will continue to be slowest in rural areas, and it is impractical to think in terms reversing slow growth wherever it occurs. For this reason, it is widely believed that particular areas should be singled out, and turned into "growth centers." The argument for this approach hinges partly on the notion of critical mass--that new industry requires centers large enough to have an adequate pool of labor, and to provide a reasonably full range of services both for the firm and its employees. In addition, the resources of the state available for encouraging growth are limited, and should not be dissipated in

Figure 1.10

Percentage Change in Population
Montana Counties, 1960-1970



Source: United States Department of Commerce, Bureau of the Census.

scattershot efforts, but concentrated in a limited number of coordinated programs.

There is a good deal of sense in this argument, but if such an approach is to be followed in Montana it will be necessary to break down some long-standing parochial barriers to regional cooperation. Moreover, "growth-center" approach would necessitate substantial migration within the state, and require many people to change their way of life. It would also require some hard choices when it comes to singling out the most promising "growth centers," and a hardheaded awareness that bestowing the designation on an area does not in itself bring about the desired transformation.

Indian Poverty. Another problem that deserves priority, but that cannot be expected to yield easily, is the economic plight of Montana's Indians. As Chapter 6 points out, over 50 percent of Montana Indian families had money incomes under $3,000 in 1959. The figures for 1969, when they become available in detailed 1970 Census reports, will probably tell substantially the same story. Chapter 6 also points out that the 1960 Census found unemployment to be more than four times as high among Montana's nonwhite males than it was among white males, and nearly three times as high for nonwhite females as for white females.

On average, Indians receive substantially less education than whites, and those at work are concentrated in low-paying jobs. One of our Staff Studies deals with possible approaches to this problem. It argues that the major need is to find ways to adapt the Western factory system to Indian cultural values and traits. Indian workers apparently

are best suited to enterprises where the work is done individually, and payment is based on work completed. Experience indicates that precision work, such as electronics parts manufacturing and the cutting of diamonds and jewel bearings is especially appropriate. As an example, the paper points to an electronics manufacturing plant on the Sioux Reservation near Yankton, South Dakota, which has established an enviable reputation for the quality of its work. But as the paper concedes, there is much to be learned before we can expect to get far in the difficult job of assimilating Indian workers into a predominantly white economy without violating Indian cultural patterns.

Achieving a Balanced Job Market. One of the major explanations of differences in per capita personal income among states is variation in the structure of the job market. In Montana, the decline of mining and railroad employment has tended to reduce not only total population and income, but per capita income as well, because pay in these two industries is unusually high.

It is entirely possible for a state to attract substantial new industry without increasing per capita income, if the new businesses pay low wages. In this connection, it is worth noting that the trade and service industries that are most directly tied to tourism typically pay low wages. For example, in 1968 employees of eating and drinking places earned at an average annual rate of $2,557; for hotel and motel workers the figure was $2,600, and for workers in automobile dealerships and gas stations it was $4,978. Those who did not work all year (and there were many of them) earned proportionately less than these annual rates.

One proposed new venture--the Big Sky of Montana recreation development in Gallatin and Madison Counties--aims to operate year-round, offering skiing as well as summer recreation facilities. In addition to public lodging facilities, a large number of homesites will be available. This approach helps overcome the problem of seasonality. But it is likely that as long as present patterns of school attendance and family vacations persist, travel for recreation will continue to be concentrated in the summer months and around the Christmas holidays. This means that jobs in resort areas will continue to be seasonal.

Montanans should not neglect the fact that the state needs industries and businesses that will employ skilled workers and provide steady jobs. This is especially true if the rapid net out-migration of highly educated young workers is to be moderated.

Notwithstanding the need to be selective in efforts to increase primary employment, it should be kept in mind that the major employment impact of attracting a new primary industry is on derivative employment, in industries that serve local markets. And here the prospects are that a wide range of jobs, from professional to blue-collar, will be opened up.

Labor Market Information. Just as faster growth of jobs could help to reduce unemployment, so would intensified efforts to match available workers to jobs, and to make available to unemployed Montanans better information about opportunities both inside and outside the state. Most workers who migrate any large distance to find jobs rely on information from friends and relatives, a strange phenomenon in this era of the "information revolution."

Detailed information about local labor market conditions, about the skills that are in greatest excess supply, and about seasonal patterns of unemployment, are necessary ingredients in the development of rational strategies for generating a better labor market for Montanans. Expansion of the data gathering and disseminating activities of the Employment Security Commission is needed. An expanded program would, of course, require an expanded budget.

Pollution Control. Another critical area is pollution control and environmental protection. If controls were costless, presumably no one would resist them. But they are not costless. They cut into business profits, raise product prices, and reduce the demand for workers in affected industries. It is against such costs that the gains from tighter controls must be weighed.

The precise effects depend importantly on the nature of the controls and on what other states and the federal government are doing. If Montana's anti-pollution policies are substantially more exacting than those of neighboring states, their impact on business activity will be more pronounced than it would be if the state were "staying in line" with her neighbors. Nationwide standards imposed by the federal government would in one sense be ideal, for they would remove or reduce incentives of states and local governments to compete on the basis of less onerous restrictions. But even then, some industries would find it profitable to shift polluting operations to other countries where standards were less exacting.

Some persons contend that strict pollution controls would make the state so attractive to clean, "light" industries that employment

and income would actually rise. They assert that this is so, and they may be right. The question is one of fact, not theory. The factual information is not easy to come by.

If our own guess is correct, and it is a guess, meaningful pollution controls will, at least in the years immediately ahead, work to hold employment and income in Montana below the levels they would reach if policies were more lax. In return, Montanans will have a cleaner environment.

Assuming that stricter controls will inhibit growth, at what point do the gains from a cleaner environment fail to justify the costs of further controls? Do the controls that are adopted minimize the adverse effects on economic growth for a given gain in environmental quality? Does it make sense to adopt the same emission standards for all parts of the state when pollution problems are clearly worse in some areas than in others? Has enough effort been devoted to evaluating the harmful effects of various pollutants, so as to establish a rational order of priorities? In Chapter 7 we suggest that more attention should be paid to getting the most out of pollution regulation. The controls that have been adopted both here and elsewhere smack of arbitrariness that in turn suggests inefficiency. The answers to these questions are not easily found, but that does not mean that they should be ignored or relegated to the background.

SOME CONCLUSIONS

There is reason to be concerned about Montana's slow economic growth. But it does not follow that state and local government policies are the primary cause of slow growth, or that they should be expected to reverse it. As we have stressed, any state's powers to determine its economic destiny are sharply limited, by law, by the fact that the policies that can be used have limited impact, and by the fact that some of those policies entail conflicts with other goals.

Our projections visualize a decline in primary employment from 83.0 thousand jobs in 1968 to 81.2 thousand jobs in 1980. The projections are admittedly crude and speculative. They reflect what we consider to be the most likely set of fundamental economic forces at work, nationally and locally, in the decade ahead. These forces, in our opinion, will continue to generate the kinds of pressures that have held down (indeed reduced) primary employment in the state since World War II. They include continued slow growth of employment nationally in some of Montana's most important primary industries, the cost of shipping products to major national markets, and the fact that the state's surplus labor is spread all over the map.

Total employment is projected to increase from 254.4 thousand in 1968 to 278.4 thousand in 1980, thanks mainly to the continued shift toward derivative jobs. The overall increase of 24,000 jobs is, according to our projections, 40,000 fewer than would be needed to make room for the entire "natural" growth of the labor force and, simultaneously, reduce the state's 1980 unemployment rate to the projected national average of 3.7 percent.

Using our projection of 2.4 derivative jobs for every primary job in 1980, it would be necessary for primary employment to increase by 12 thousand jobs, or 1 thousand each year, between 1968 and 1980 to eliminate this job gap. Such a boom would entail a dramatic reversal of the postwar trend. Between 1950 and 1968, total primary jobs fell by nearly 1 thousand per year.

We believe it is impractical and unwise to think in terms of eliminating the job gap entirely. It is, of course, possible that our projections are seriously in error, and that by 1980 it will turn out that there was not, in fact, a job gap. But it is not reasonable to assume that such a reversal could be brought about simply by state actions designed to attract new industry.

Moreover, some of the employment gains that we have projected rest on fragile assumptions. For example, our projection of a 1.3 thousand increase in jobs in metal mining depends heavily on assumptions that the market for primary metals in general, and for copper in particular, will remain strong. This market is notoriously difficult to forecast. The projection also depends on an assumption that this growth will be compatible with state programs for protecting the environment. The same is true of our projections of employment in metal processing and wood products.

We think it would be a mistake for the state to set a unique target for economic development policy in the coming decade, and that it would be particularly unrealistic to set a target such as elimination of the job gap. Goals are not unique and cannot be pursued single-mindedly. Given the uncertainties that must surround any projections, the limitations on the state's powers to promote growth, and the inability to assess

fully and to resolve in advance the potential conflicts between any particular type of growth and other policy goals, setting a concrete goal in terms of, say, employment in 1980, would probably result in undue pressures to accomplish what might well turn out to be the wrong task.

But we do believe that promoting a faster growth of job opportunities is a sensible general goal of state policy. At times, this goal can be expected to conflict with other goals, and difficult decisions as to priorities will arise. We see no way for prescribing, in advance, and from a university office, what order should be given to the priorities.

Indeed, we do not believe that a permanent order of priorities--a grand design--can or should be established. Planning is a continuous process which demands a great deal of flexibility and an ability to respond in different ways to different circumstances. What is a desirable development for one part of Montana may be undesirable in another; a project that is not feasible today may be feasible in 1975; residents of one city may have different priorities than those of another. It is not that policy should be made ad hoc. What we think is needed is an orderly, continuous process that will allow Montanans to consider the facts, express their preferences, and permit priorities to be established and changed in the light of current economic realities and citizen preferences.